ROCKS and MINERALS

Mineralogy
•
Geology
•
Lapidary

BANDED AGATE
Scurdie Ness, Angus, Scotland
Sandy Rattray Collection
Glasgow, Scotland

60c

January - February, 1957
Whole Number 256

70th LIST OF MINERALS

IDOCRASE (VESUVIANITE) v. CALIFORNITE. Happy Camp, Cal. Translucent green slab, polished both sides. 6x3x5/8". 1¼ lbs. Very Good $15.00
FLUORITE, Weardale. Grp. of bright yellow xls. 4x3 ..... 5.00
FLUORITE Alston. Grp. of lilac xls. w. white inclusions. 5x3 ..... 5.00
FLUORITE Alston. Grp. of 3" lilac xls. 5x5x2½. - 2¾ lbs. Very fine. 12.50
ANDRADITE, Langban. Bright xls. w. Rhodonite on ore. 2½x2½. 2.50
CHONDRODITE, Tilly Foster, N. Y. 1½" red xl., partly coated 5.00
APOPHYLLITE, Guanajuato. Small xls. on Amethystine Quartz. 2½x2 .... 2.50
APATITE, Renfrew. Red-brown xl. group. 2½x2x1½ 3.00
DESCLOIZITE, Uitsab, S.W. Africa. Xld. on xld. Calcite. 3½x2 ..... 3.00
DANBURITE, Russell, N. Y. (From a very old collection) Group of sharp opaque xls.: 2½x1½ $10.00; 1½x1½ $7.50; 1¾x1½ $6.00.
BRUCITE, Tilly Foster, N. Y. Well xld. on rock. 3x2½ 5.00
HETEROGENITE, Goodsprings, Nev. Masses in rock. 3x2½x2 ..... 3.50
CINNABAR, Mt. Jackson, California. Xlline. mass. 3x2 ..... 2.50
CROCIDOLITE, Griqualand West. Deep blue fibrous mass. 2½x2½ 3.50
WILLEMITE, Tiger, Ariz. Micro. xls. on xld. WULFENITE, etc. 5x3x1½ .. 7.50
HUEBNERITE, Golden, Colo. Radiating xlline. mass in Quartz. 3x2x1½ ... 3.00
HEMATITE, Puy de la Vache, France. Micro. xls. in old lava. 3x2½ 2.50
STILPNOMELANE var. CHALCODITE, Antwerp, N. Y. Tufts in Hematite. 3x2½ 3.50
CUPRITE, Copper-Queen, Bisbee. Well xld. w. Copper. 2½x1¾. Coll. 1905 3.50
SILVER, Cobalt, Ont. Bright xld. plate, no matrix. 2x1½ 6.00
NICCOLITE & SMALTITE, Cobalt, Ont. Solid mass. 3x2½x1¼. 1¼ lbs. 4.00
CHALCOPYRITE, French Creek. Skeletal xls. w. Octah. PYRITE xls. 3x2½ 3.00
CYRTOLITE, Bedford, N. Y. Partly xld. mass. 2x1½ 2.50
BISMUTHINITE, Bolivia. Xls. intergrown w. CASSITERITE. 3x2x1½ 5.00
VASHEGYITE, Nye Co., Nev. Veins in bright green Opal. 3x2x1½ 3.00
RHODONITE v. FOWLERITE, Franklin. Xld. & xlline. mass. 5x3x3. - 4 lbs. 15.00
SPODUMENE, Huntington, Mass. 2x2 term. xl. w. Quartz matrix. 3x2x2 ... 3.50
QUARTZ, Poretta, Italy. Group of "cavernous" xls. 3½x2½x2 ..... 3.00
ILVAITE, Balmat, N. Y. Small xl. masses in chloritic rock. 4x2½ 2.50
BARYTOCALCITE, Cumberland. Xld. mass. 4x3 ..... 3.00
ARAGONITE, Sicily. Twin xls. on 3 sides of rock. Fl & phos. 3x2 ..... 3.50
TOURMALINE, Pierrepont, N. Y. Brilliant black xls. w. Quartz. 4½x4x2 .. 10.00
MILLERITE, Gap Mine, Pa. Radiating mamm. mass. 2¼x1½x¼ 3.00
PYROSMALITE, Sweden. Small xls. densely coating ore. 2½x1½ 3.50
WOLFRAMITE, Cornwall. Xlline. masses in Quartz. 3x2 ..... 2.50
SPINEL, Amity, N. Y. Xls. up to 1¾" in matrix. 4x2½ 3.50
MOLYBDENITE, Frankford, Pa. Numerous xl. plates in rock. 4x2½ 2.50
GROSSULARITE, Transvaal. Massive, green. "South African Jade". 2x2 .... 2.00
WITHERITE, Fallowfield, England. Well xld. mass. 2½x2 ..... 2.50
SPINEL, Sparta, N. J. Small red xls. in rock. 3x2 ..... 2.50
OLIVENITE,Tintic, Utah. Small xls. on matrix. 2x2. (Prior to 1905) 2.00
MAGNETITE, French Creek, Pa. Xld. w. Pyrite xls. on mass. 3x2x2 ..... 2.50
SMITHSONITE, Kelly, N.M. Blue mammillary. 8x5. 6¼ lbs. 35.00
SIDERITE, Antwerp, N.Y. Xld. in vuggy Hematite. 3x2½x2. 1¼ lbs. 3.50
CALCITE, Joplin. Large purple xl. w. inclusions of Marcasite. 4x4½x2 .... 5.00
CARYINITE, Langban. Xlline. mass in ore. 3x2 ..... 3.00
HAUERITE, Sicily. ¾" octahedral xl 6.00
DATOLITE, Westfield, Mass. Well xld. slab. 4x3x1¼ 5.00

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ROCKS and MINERALS

PETER ZODAC, Editor and Publisher

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CHIPS FROM THE QUARRY

Christmas Calendars

Last Christmas, R&M received a number of calendars all large and beautifully illustrated. One of the first to arrive was the "Minerals and Rocks Calendar—1957" from Benjamin M. Shaub, 159 Elm St., Northampton, Mass. This beautiful calendar contains 120 pages of which 56 are devoted to pictures of rocks and minerals. It's for sale—see Mr. Shaub's ad in this issue.

Lapidary Journal, Del Mar, Calif., delighted us with their Gem Calendar, with beautiful illustrations in color, very, very unique and nice!

Our printers, Kimball Press, Fair Lawn, N. J., sent in a large pictorial calendar, whose large, scenic pictures, have an international flavor as Alaska, Canada, Hong Kong and Siam are represented in addition to U. S.—the pictures are in color and suitable for framing.

United Air Lines, Box 7710A, Chicago 80, Ill., again remembered us with one of their large pictorial calendars which features large paintings in color that are also suitable for framing.

From far off Samoa in the Pacific we have two calendars that were sent us by Max Haleck, Pago Pago, Tituila, American Samoa—one large and one small and though not illustrated they are both in color.

But the calendar whose beautiful pictures in color have no equal for clear detail, coloring and all around beauty is the "Scots Pictorial Calendar—in colour—1957" that was sent us by Sandy Ramsay, 1015 Aikenhead Road, Kings Park, Glasgow S4, Scotland. "A mighty fine calendar is this, Sandy. Wish we could get its printers to run off a few colored illustrations for us!"

Many of our subscribers and advertisers sent in small calendars, some are of pocket size and so most appropriate.

To all who sent in calendars—please accept our most sincere thanks.

PHOTO ON THE COVER

The photo on the cover is of an attractive banded agate (different shades of brown) in the collection of Sandy Ramsay, 1015 Aikenhead Road, Kings Park, Glasgow S4, Scotland.

The specimen comes from the east coast of Scotland, on the North Sea (from Scurdie Ness, near Montrose, Angus).

See "Hunting agates in Scotland" by Sandy Ramsay, R&M, March-April, 1954, pp. 127-129.

It couldn't be a nicer present!

Editor R&M:-

Enclosed you will find our check for one year's subscription to "Rocks and Minerals" magazine for:

Mr. George R. Stilwell
1023 West 5th St.
Plainfield, N.J.

This subscription was won by the above as a door prize at the November meeting—It couldn't be a nicer present.

Mrs. L.C. Thompson, Sec.,
New Jersey Mineralogical Society,
802 College Place
Plainfield, N. J.
Nov. 23, 1956

Idaho in color

Clarence Martin, R 3, Blackfoot, Idaho, sent us a copy of "Idaho in color"—a beautiful illustrated (in color) magazine that features Idaho's Vacation Paradise. It is a 9 x 11½ 34 page publication, sells at $1 per copy (annual edition) and is published by the Belcher Publishing Co., 715 Grove, Boise, Idaho.

Hunting Minerals in Morocco

By John F. Jedlicka
3536 E. Fairmount Ave.
Baltimore 24, Md.

I was greatly surprised when I received orders for duty at the U.S. Naval Communications Station located at Port Lyautey, Morocco.

Before leaving the states, I visited the Smithsonian Institution and talked with Dr. George Switzer and Miss Mary Mrose about what the prospects would be for hunting minerals there. They showed me what specimens they had acquired from localities in Morocco, provided me with a map and gave me letters of introduction to Monsieur Francois Permingeat and Canon Gaudefroy of the French Geological Survey, located in Rabat, the capital of Morocco.

Approximately a month after reaching Morocco, I took the train from Port Lyautey to Rabat. Monsieur Permingeat and Canon Gaudefroy received me very cordially and offered to provide me with information and make it possible for me to go on some collecting trips to various areas. I also met Monsieur Charles Pelletier-Doisy, who has arranged and accompanied me on trips to Oulmes and El Kiar.

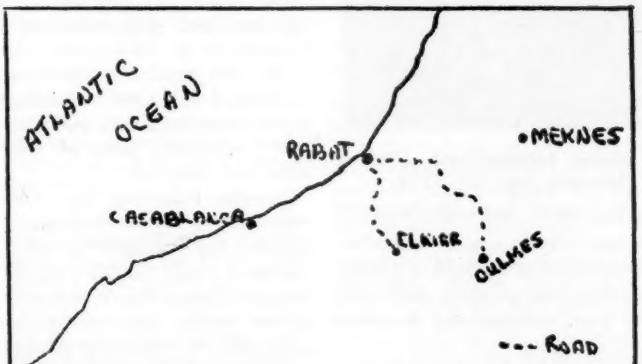
On July 14, and 15, 1956 Charles and I drove to Oulmes to visit the only tin locality in Morocco. We hoped to collect ore specimens of tin, wolfram, and crystals of cassiterite and beryl. On our way back to Rabat, we planned to stop at Djebel Haddid to collect fossil trilobites.

Upon reaching Oulmes, which is located at the edge of the middle Atlas Mountains, some 75 miles S.E. of Rabat, we immediately arranged for rooms and meals at the attractive, Hotel Des Thermes.

Since Oulmes is famous for its thermal springs we decided to visit them before lunch. Water from these springs is bottled and exported to many parts of Morocco.

We followed the trail down to the thermal springs, located in the valley about 1485 feet below the Hotel.

It was the first time I had ever seen a thermal spring. We spent a half hour there bathing in the warm pools (41°C) and then climbed back up the mountain



Sketch of the central portion of Morocco showing the El Kiar and Oulmes prospects.

in the blazing, noonday sun, arriving just in time for lunch.

After lunch we drove to the tin prospect which is operated by Monsieur E. H. Manfroy, a Belgian geologist. Monsieur Manfroy invited us to walk through the areas that are being worked and to collect as much as we pleased.

He joined us later in the afternoon and drove us to all parts of the tin deposit pointing out the rock formations present and acquainting us with the history of the development.

The tin deposit of Oulmes is the only one to have been exploited a long time in North Africa and appears to have been known in very ancient times. We believe this because, now and then, one finds tools which may have been used during the time of the Romans. Apparently it was forgotten during the last century and was rediscovered about forty years ago.

Monsieur Charles Pelletier-Doisy collecting at El Kiar, Morocco. Sept. 24, 1956.

For the past thirty years the Manfroy family has been developing it. Just when the development has progressed to a point where the mine can produce well, activities have been curtailed due to social trouble.

The prospect is of the open pit type. The mineralized zone appears to be about a quarter of a mile wide and well over two miles in length. The ore is low grade. The tin mineral is cassiterite and is found either in the granite or in the quartz gangue. Crushing and washing, although done by hand, manage to produce a high grade concentrate. Smelting methods, perhaps obsolete by American standards, are quite efficient.

Wolfram was also discovered here during World War II, but the deposits have not been exploited commercially yet.

The author (left) and Monsieur Doisy collecting on one of the dumps at El Kiar, Morocco. Sept. 24, 1956.

Minerals collected were cassiterite crystals, black tourmaline (splinter shaped crystals in granite), wolframite, massive milky quartz and iron stained beryl crystals associated with muscovite mica and fluorite.

We said goodbye to Monsieur Manfroy at about 6 P.M. and returned, exhausted to our hotel for dinner. Afterward Charles and I compared notes on what we had seen and collected.

On the following day, while on our way back to Rabat we stopped at Djebel Haddid and managed to collect partially complete fossil trilobites in shale. However we were unable to find any specimens of the quality that are in the Survey's collection. If conditions permit, we will probably visit this locality again sometime during this year and perhaps have better luck at collecting the trilobites.

One of the workings at El Kiar, Morocco. Monsieur Doisy examining an interesting specimen. Sept. 24, 1956.

On September 24, Charles and I journeyed 48 miles S. of Rabat to visit the copper dumps at El Kiar. We hoped to gather specimens of native copper and micro crystals of malachite.

Most of the pits and galleries, that were worked about 30 years ago and then explored again a few years back, have been filled in and were inaccessible.

During the three hours that we were there, we covered some of the dumps pretty thoroughly.

Specimens of barite and native copper were collected. We also found micro crystals of malachite. Microscopic examinations later showed these crystals to be too damaged to be worth mounting.

At this time the El Kiar area has now been declared "out of bounds" to U.S. service personnel. Once conditions permit us to travel into the interior, we will again visit El Kiar.

The next trip on the agenda will be to the Souk El Arba District, located in northern Morocco, to collect prehnite, native sulfur, fluorite and twinned dolomite crystals.

U.S. Civil Service Opportunities

The United States Civil Service Commission announces that applications are being accepted for Engineer and Physical Science positions for duty in activities of the Potomac River Naval Command in and near Washington, D. C., and in the Engineer Center, U. S. Army, Fort Belvoir, Virginia. The beginning salaries range from $4,480 to $11,610 a year.

To qualify for the lower grade positions, applicants must have had appropriate education or experience or a combination of both. Additional professional experience is required for the higher grades.

Further information and application forms may be obtained at many post offices throughout the country, or from the U. S. Civil Service Commission, Washington 25, D. C. Applications must be filed with the Executive Secretary, Board of U. S. Civil Service Examiners for Scientific and Technical Personnel, Potomac River Naval Command, Building 72, Naval Research Laboratory, Washington 25, D. C. They will be accepted until further notice.

The best spent $3.00 of the year!

Editor R&M:-

Just a few lines to wish you continued success and good health in this New Year. I am enclosing my renewal for "Rocks and Minerals", for the best spent $3.00 of the year. In my humble opinion "Rocks and Minerals" continues to be the best and the only true "Rockhounds" magazine. I've tried them all at one time or another and the rest never seem to satisfy the true collector and soon fade from the scene. My only concern is, who is going to carry on this monumental task you have engaged in when you are no longer able? The magazine is a tradition with true collectors and would leave a vast vacuum in the collecting field should it cease to exist.

So keep up the good work and feel assured that I for one am aware of your devotion to this task and realize the personal sacrifice it represents.

Charles L. Gschwind
6931 Diana Drive
Cincinnati 24, Ohio

Jan. 7, 1957

"THE WORLD DO MOVE"

By Frank H. Waskey

Oakville, Wash.

That the surface of our earth is constantly undergoing changes that are gradual is well known. That sometimes marked changes come about in a very short time was learned at first hand the summer of 1956.

Several times during the past forty years, I have visited the vicinity of Cape Vancouver, Nelson Island, Alaska, to secure nodules of Vivianite, pseudomorph after wood. These were found on a fan like talus, sloping from the foot of a perpendicular scarp of heavy bedded clastic rock several hundred feet above the sea. Down the center of this fan a little rill had cut a shallow trench. Along this rill could be found rounded or oval nodules of the blue mineral, sometimes having a face or end showing the annular rings of the replaced branch or bole.

Last August, when a comparatively calm day offered opportunity to round the usually stormy Cape, an Eskimo companion and I did so.

As we landed on the narrow-beach, I thought my companion at the outboard motor had landed in the wrong cove. Gone was the easily ascended talus, and missing was the tiny stream. Instead a wide spreading expanse of large angular blocks of stone made it difficult to ascend to the foot of the Cliff from whence it was known the Vivianite had fed in former years. Some sudden stress had toppled literally thousands of tons of rock from the Cliff face, and its momentum had strewed it towards the sea.

After much scrambling over and around the mammoth slide we did find a few angular chunks of the Vivianite, but much of it was green, not the lovely blue bird-blue of former years. The reason, no doubt being that the green pieces had not been long exposed to the oxidizing effect of surface air and water.

The little stream's spring source at the foot of the cliff had been buried with the great fall of rock, and now the water had to find its way to the sea in devious trickles at divers places along the sea front.

I missed the good pickings of other visits. But more I missed the little stream with its happy Song and the opportunity of quaffing its crystal-clear water.

Later in the summer, I visited Platinum, between Goodnews Bay and Chagvan Bay, Mining Co., largest producers of Platinum in America.

Long before the discovery of the Platinum deposits on the east side of Red Mountain which fronts Kuskokwim Bay, I had trudged the beach for many miles between Goodnews Bay and Chagvan Bay, indentations of the coast line of Kuskokwin Bay.

Along the half dozen miles of beach just to the south from the South Spit of Goodnews Bay, there were, in the 1910's and early 1920's, a half dozen sizable lenticular deposits of Black Sand. One of them was of remarkable length between its two crescent tips, of a depth of from 8 to 16 inches. It was resting on a flat shelf of slide rock, so high above ordinary high tides that one wondered if it were not an Aeolian deposit.

Besides this very ususual concentration of heavy minerals at this remarkable height, there were several other lenses of Black Sand at about the usual limit of high tides, all having three measurable limits. There were also many "smears" of Black Sand overlying the normal lighter sands at different levels between high and low water mark.

During my visit at Platinum, I had engaged a skiff and kicker to land me along the beach, where I had seen these deposits a generation before. Continuous storms made this impracticable.

Learning of my disappointment, Mr. Ed Olsen, Superintendent of the Platinum mines, very thoughtfully furnished a jeep truck and two young men to drive to and

along the beach as far as the point where memory said the largest of the lenses of Magnetite had been. Not a sign of Black Sand, let alone a lens of it. We then walked severals miles farther south along the beach to the point where Red Mountain thrusts a boulder-bestrewn point out into the ocean.

I had been told at Platinum and the diggings, that I might not find conditions the same as they were Circa 1911.

But I was not prepared for such a great change. Imagine my surprise and disappointment! Not only were all of the lenses of heavy minerals gone but nowhere along more than five miles of beach did we see even one "smear" of Black Sand.

"How Come!" Well, it is of record that in 1929 a series of very exceptionally high tides accompanied by severe winds had played havoc all along the Bering Sea littoral.

Residents of the area, say that on occasion a northerly storm puts scattered lenses of concentrates ashore. Enough to tempt the few old timers remaining to get out their gold pans. The next storm usually leaves the beach bare of heavy sands.

When the streams heading in the east side of Red Mountain were first sluiced in the 1920's Platinum was $27.00 an ounce. The miners with their meager equipment were hard put to make it "Pay".

Rocking along the beach was also occasionally tried. No can do.

But as of October 1956, MINING WORLD quotes Platinum $103.00 - $107.00! What if, as the Old Timers wishfully say; "Some day the right combination of current, surf and undertow will bring back the beach diggings"

Sorry indeed, is deponent that his dream of bringing "Outside" a few pounds of Magnetite with a scattered tiny grain of Pt. and Au. did not come true. However, Yours Truly did come home with one prize—purchased from a friend who has long been active in supplying much needed Platinum to our Country.

You good folks all know of the 'half breed' copper and silver nuggets from Upper Michigan. And once in a lifetime or so, a 'half breed' slug of Gold and Silver has been found somewhere between Mexico and Nome. But tell me, who else has seen a Platinum nugget with a color of Gold an integral part of it? May your next find, dear Reader, give you as much pleasure as does my self mounted Micro mount!

R&M interesting and informative!

Editor R&M:-

You are sending out interesting, intelligible and certain information. May the future have many more years of the same from your pen and press.

Marion E. Jasperson
RR#5, Box #55,
Indianapolis 3, Ind.

Nov. 5, 1956

Saved time by reading R&M!

Editor R&M:-

I received your sample copy of the July-Aug. issue and got more information from it than 4 weeks research from library books.

Walter Lowe
615 North Main St.
Greensburg, Pa.

Nov. 14, 1956

Stands out!

Editor R&M:-

You will find enclosed check for $3.00, for a 1 year subscription to your fine magazine. The many superior features make it stand out above all your competition. Thank you.

Archie Bannister
914 Agatite,
Chicago 40, Ill.

Nov. 3, 1956

Start the New Year with R&M

Editor R&M:-

I can't think of a happier thing to do, to start the New Year, than to renew my subscription for R & M;

Mary Frizzell
David Lipscomb College
Nashville, Tenn.

Jan. 4, 1957.

DISCOVERY OF GOLD AT BYRON, MAINE.

By C.F. Marble, Buckfield, Me.

In the late fall of 1889, Perley Whitney and his father were going through Byron, Oxford Co., Maine, in search of trapping grounds. Crossing the bridge at Coos Canyon they stopped and commented that it look liked gold country—they had both been in the West and worked around gold mines and placers (working at minor jobs).

They went on over Byron Notch and stopped with an old farmer over night. After supper the old farmer got talking. It seems a summer visitor used to come every year and camp out for a few weeks or a month in a hush-hush way, that is, he took care that no one saw where he went or did.

The old farmer was curious to know what he was after. Perley asked what it was like and the farmer said it was yellow stuff.

"Was it heavy?" asked Perley.

"Oh, yes, very heavy," replied the farmer.

Perley and his father said nothing more but looked at each other out of the corner of their eyes and—the next spring, March 1890, they were camping on the East Branch of the Swift River at Byron—up in the mountains where spring comes late.

They found good placer ground and made a deal to buy the farm. Perley remained to watch things while his father went back to Upton to raise the money.

There was another fellow that was an agent for a Bethel man and he suspected what was brewing and started back to Bethel after nosing around and trying to horn in and block the sale.

The elder Whitney came back with the money but the old farmer refused to carry out the agreement. Whitney, Sr., was very angry and started to walk off but Perley pacified him and got permission to talk to the farmer. The old farmer said. "I sold too cheap. I aint agoing t do it. I am going to raise the price."

"Yes, yes," said Perley, "but how much?"

The old farmer replied, "A hundred dollars."

Then the elder Whitney went to Mr. Reed in Roxbury and borrowed the extra money.

They retuned on Friday to complete the deal but the farmer said, "No deal on Friday, bad luck." But he agreed that Saturday was O.K. Then on Saturday the old farmer scarcely got his breakfast before the Whitneys took him to Roxbury and to a notary public and closed the deal. As they were leaving the notary public they met the man from Bethel whose horse was on the run and covered white with lather. The man was waving his arms and yelling, "Don't sell until I get there," but he was too late.

In the next two years the Whitneys took out over $3,000 worth of gold and people to this day are still digging gold around there. Perley made a living for 40 years with his gold mine and tinkering with watches and guns. He could alloy his gold as desired and make a pin, ring or any other ornament out of Byron gold—guaranteed.

The money borrowed from Mr. Reed was repaid in gold minted from the Byron gold and I have seen those coins. People tried in all ways to find just where Perley dug his gold but without success and then called him an old crab because they could not find out.

The truth is—the gold is not present in Byron in large quantities but must be obtained by hard work .

(Verbal communication from Perley Whitney many years ago.

FIVE TYPICAL PENNSYLVANIA MINERALS

By Dr. Richmond E. Myers Dean of Men, Moravian College, Bethlehem, Penn.

One of our younger readers, obviously a rock hound in the making, raised the very interesting question, "What would you suggest as the most typical Pennsylvania minerals to have in a mineral collection," On the spur of the moment we had no positive answer ready. We begged leave to give the matter some thought. Our first task was to decide what might constitute a typical Pennsylvania mineral. Should it be one found only in Pennsylvania? This would limit our list considerably. Should it be a mineral named for a Pennsylvania locality where it was first recognized and described as a new mineral? Should it be a mineral named for a place in Pennsylvania, where it occurs in greater abundance than any other place? Would it be cricket to include a mineral having national, or even world - wide distribution, but which has been of significance to the development of Pennsylvania in some manner or other? There are minerals found in this state which can fit into any one of these categories.

Because we could not make up our mind as to which should be the qualification best suited to naming typical Pennsylvania minerals, we decided to formulate our list by making use of each category to some degree, and limit the list to minerals listed in the ordinary textbook on mineralogy, thus excluding fuels and rocks.

We know of five minerals which bear Pennsylvania names, so certainly there is justification for including them on our list. One of these is a clay mineral, but a mineral nevertheless, so in it goes. These five minerals are:

1. NESQUEHONITE a hydro magnesium carbonate which forms colorless to white orthorhombic crystals. It is named from the town nearby where it was first found and described.

2. LANSFORDITE a more complex magnesium carbonate, which although it closely resembles Nesquehonite, crystalizes in a different (triclinic) system. Also named for the place where it was first recognized and described.

3. LANCASTERITE another hydro magnesium carbonate, in fact, a form of hydromagnesite, a typical Lancaster County mineral, found in the chrome mines and serpentine of the barrens. Named for the county-not the city.

4. EASTONITE a silver-white to silver - green variety of chlorite, also known as chlorite vermiculite. It is found in the Williams Quarry along the Delaware River Road (U.S. 611) just north of Easton.

5. SAUCONITE a clay mineral which was associated with the zinc mines in the Saucon Valley, chiefly the Uberroth Mine.

Of these five minerals the first two are fairly rare. Should you acquire specimens, you will find them hard to keep, for they easily dehydrate into a white powder when exposed to air for any length of time. Eastonite makes very attractive cabinet pieces, and although today it is difficult to find good specimens, it is still to be had with careful hunting. Lancasterite is nothing very showy, and the Sauconite is the least attractive of the five, but all are interesting as collector's items.

To this group we must add a mineral which in its usual form is quite common in many places. This is sphalerite, a common ore of zinc. However the sphalerite that used to come from the Uberroth Mine in the Saucon Valley looks different from any other sphalerite, and therefore we include it in this list, Were it not for the fact that its chemical composition labels it sphalerite, we might agree with Bob Butler, who when teaching at Lehigh would insist that Saucon Valley ZnS should be tagged with a different name.

One mineral named for a Pennsylvania mineralogist must be listed. This is Genthite, named for Frederick A. Genth.

It is a nickel-magnesium - hydrous silicate, ranging from an apple green in color to a yellow - green. It is described by Dr. Herbert Beck as "the most distinctive mineral of Lancaster County."

In keeping with today's developments, the mineral thorianite belongs on our list. This is indeed a rare item, being found in less than a half-dozen places in the world. It is one of the Williams Quarry minerals at Easton, and altho not taken from there as a source of thorium, it places this locality in a very exclusive category.

To round out our list to ten, we add jasper and piedmontite. Jasper, so common in the Reading Hills, was the first mineral mined by man in Pennsylvania. The Indians used it for arrowheads. Piedmontite, notably from the South Mountain area in Adams and Cumberland counties, has always been of interest to collectors as a Pennsylvania mineral.

—Bethlehem Globe Times,
Bethlehem, Penn.

New York City find wins 1st Prize!

In the Sept.-Oct. 1956 R&M, p. 467, mention was made of a find of jasper, chalcedony, and agate in the dirt of a small excavation (21x21 feet) on 96th Stret and Broadway in New York City. The find was made by Martin Walter, Manager Hotel Paris, West End Ave. & 97th St., New York 27, N. Y.

A letter dated Dec. 3, 1956, from Mr. Walter reads:

"I showed some of the material from my 'Broadway Mine' to Dr. O'Connell. He thinks that what I found is material from the waste dump of some arrow maker (Indian) as many of the pieces show traces of chipping on the edges.

"I won first prize at our shown with a cab of this material for the most unique found specimen."

The Gem and Lapidary Society makes its headquarters at the Hotel Paris.

Collection for sale

Editor R & M:

We are going to sell our big museum of rocks, a 27-year collection. The collection contains 1055 specimens from everywhere.

We also have one of the largest Indian bowl collection in the state. It is a 50-year collection—The famous Pate Collection that we bought a few years ago. These are nice bowls, all sizes and most have grinders. This collection is also for sale. Reason for selling—health and other business.

Mrs. Dorothy McClure
Ken Dor Rock Roast
419 Sutter Ave.,
Modesto, Calif.
Phone LA 2-6992

Dec. 24, 1956

Tiburon Peninsula Revisited

Dr. D. Stuart MacRobbie
2000 Dwight Way
Berkeley 4, Calif.

Because my work does not allow much time off, I have sought to exploit collecting areas within 10 or 20 miles of my home in San Francisco. One of my favorites has been Tiburon Peninsula, Marin County, California, because of its variety of different materials which can be historically related to each other from dunite through garnet and even to clay.

Upon revisiting the boulder on Tiburon featured in the Rocks and Minerals article of March-April 1955 about lawsonite, I found great changes had taken place. The western extent of the ridge forming the backbone of Tiburon had been chewed out in a manner that would make any of us happy. In their preparations for building a large oil storage tank and a housing development nearby, the contractors cut a rather regular 45 deg. exposure and in doing so, turned over to view not only a fascinating example of weathering but also excellent material such as various schists, of which the most common was chlorite and glaucophane dykes, quartz crystals; saxonite; enstatite (some crystals); serpentine; chrysotile asbestos in significant amounts; bowenite; actinolite; and some poor lawsonite specimens, etc. The wide varieties of gradual transitions between the igneous and metamorphic of the many varieties of serpentinization and subsequent changes were bewildering to me.

I hope others in this area will take advantage of this most accessible geological lesson; I can even say I left some pea-sized garnets for them, and some especially lovely actinolite.

WORLD NEWS ON Mineral Occurrences

ITEMS ON NEW FINDS ARE DESIRED ... PLEASE SEND THEM IN.

ALABAMA—"Received your letter today and am glad to hear that you liked the ironstone geode sent you recently.

"Before I begin to mention the various minerals and rocks I have found in Alabama, I would first like to state I am a rank amateur. I do quite a bit of rock hunting about once a week, then I come back and do a lot of reading to try and identify what I have found. I am the only mineral collector in Montgomery that I know of and my collection is rather small. I have exchanged ideas and specimens with a few collectors but mainly I give most of my surplus specimens to young boys and girls of scouting age to try and get them interested in what Mother Nature has given us.

"Now, from a rank beginner, I will try to give you some Alabama news items.

1. Nature's rattlebox, as you called it, has been called by the older colored families as Indian paint pots, because of the geode being sometimes filled with various colored powders which the Indians used to paint their faces. Most of the times the geodes are sandy. I have found the following colors inside—yellow ocher, brick red, purple, and grey. These geodes are found in Pike County, Ala., which is about 50 miles north of Montgomery. I have found them scattered all over the county, but they are especially abundant just south of Troy, (Pike Co.), Ala, about 5 miles on highway 15."—letter dated Dec. 8, 1956, from James Miller Davis, 212 Guaranty Savings Building, Montgomery, Ala.

(To be continued)

An unbroken, brownish ironstone geode was received from Mr. Davis. The geode was full of loose sand which caused a rattling sound when it was shaken (especially noticeable when shaken close to the ear). A geode which rattles when shaken is called Nature's rattlebox.

ARIZONA—Flat doubly terminated loose smoky quartz xls coated by dark brown drusy dolomite which in turn is coated by gray drusy dogtooth calcite have been found at the Holland mine in Washington Camp Mining District near Nogales, Santa Cruz Co., Ariz

ARKANSAS—"Last July I spent three weeks at Hot Springs, Arkansas. During my stay I made several trips to Magnet Cove (Hot Springs County) which is about 15 miles east of Hot Springs on U.S. highway 270. Magnet Cove has long been one of the world's most famous mineral localities. Many of the minerals found there are quite rare. Today most of the minerals are hard to find mainly because of extensive mining and the rambling "rockhounds.' Almost all of the mines and quarries have been shut down and the only active mining done to my knowledge is the barite mines which actually are not inside the Cove.

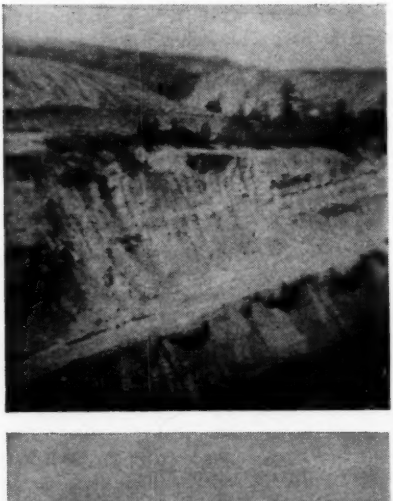
"Under separate cover I am sending you a selection of minerals that I have collected at the Cove. I have numbered each specimen along with a label. A few specimens I have not yet identified. Would you please identify these specimens for me?

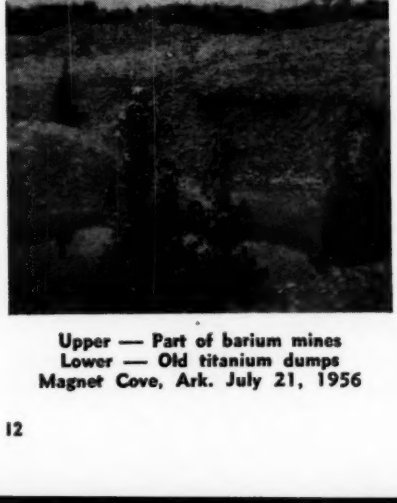
"I am inclosing two photos, one showing a part of an old abandoned titanium

pit and the other showing part of the barite pits."—letter dated Aug. 14, 1956, from William Dillon, 212 North St., McDonald, Penn.

Thirteen specimens were received from Mr. Dillon and they are:

1. Botryoidal, whitish apatite stained brown to red by iron (found in a creek bed).
2. Massive, brassy-yellow pyrite in dark brown limonite.
3. Greenish-black, lath-shaped aegirite xls in colorless nephelite.
4. Colorless, cleavable calcite containing white acicular apatite xls.
5. Group of white albite xls, stained brownish, with a few pyrite cubes (from an old titanium dump).
6. Black brookite xls on milky and smoky quartz.
7. Massive, grayish barite.
8. Black limonite pseudo cubes embedded in massive white gypsum.
9. Schorlomite (black, lustrous) in smoky gray nephelite.
10. Yellowish Melanterite coating cellular gypsum (from the titanium pit).
11. Tiny brassy-yellow, striated pyrite cubes in a cellular quartzose rock, gray in color but stained brown by iron (from the titanium pit).
12. Gray, banded barite. This is the type of barite mined at the barite mines.
13. Black, lustrous melanite in dark gray nephelite.





Upper — Part of barium mines
Lower — Old titanium dumps
Magnet Cove, Ark. July 21, 1956

CALIFORNIA—While attending the 6th Annual Convention of the Eastern Federation in Baltimore, Md., last September (see Nov-Dec 1956, R & M, p. 612) we had the good fortune to meet H.A. Mitchell of Ridgewood, N.J. Mr. Mitchell, one of our good subscribers, showed us one of the finest xled gold specimens we ever saw. The specimen was about 1½ x 1½ inches in size and came from the Red Ledge gold mine in Washington, Nevada Co., Calif.

The Red Ledge mine has a unique history, Mr. Mitchell informed us, as it was first worked for chromite, now for gold. Chromrutile has been found in the Red Ledge mine also—the only locality in California and one of the few in the world. Chromrutile occurs as small brilliant black xls with peach-blossom red kammererite on black chromite.

Mr. Mitchell showed us the specimen on Sat. Sept. 29, 1956. "It came from a pocket in the Red Ledge gold mine just two weeks ago."—he told us.

COLORADO—Beautiful specimens of pink, xled rhodochrosite have been found at Alicante, Lake Co., Colo.

CONNECTICUT—"The July-Aug 1956 , R & M (p. 358) contained a letter of mine, verifying the occurrence of idocrase at the Gillette Quarry in Haddam Neck, Connecticut. On the day before I received my copy of the magazine, I made a new discovery of that material at the famous old locality. What I had found previously came from the newest dump and was not at all abundant. In fact, only a few good specimens were obtained. On this recent occasion though, I ran into a four or five inch vein of typical brown idocrase. The vein was enclosed with successive layers of actinolite and diopside, adjacent to a thin band of marble whose color varied from green to black. Many excellent specimens, all partially crystallized, were removed from the wall of the quarry. The remnants of the vein can be seen on the right hand side, just beyond the entrance to the dry section of the main pit. Some of the crystals, or columnar masses, were six inches in length. A one inch mass of white scheelite, having a vivid blue fluorescence, was noted in a particularly fine example of idocrase; it had been overlooked at the locality, probably because it was nearly dark when I finished wrapping the many pieces. I had previously found scheelite at the quarry, but only as specks. Two other minerals, never before known from there, were spotted among the rock which I had broken: allanite, as tiny black prisms surrounded by radiating cracks, and molybdenite, as a single silvery scale in idocrase.

"My good friend, Bob Gallant, of Moodus, Connecticut, has a superb example of topaz from the Gillette Quarry. He discovered the mineral there last winter, while breaking a mass of rather fine-grained pegmatite which also yielded a beautiful pink beryl crystal. The topaz crystal is almost an inch long, and it is embedded in a typical Gillette matrix. The specimen is perfect in form, with only a few fractures to mar an otherwise gem-my crystal. It is virtually colorless, though an extremely slight bluish cast may be seen on close examination. Bob gave me a loose crystal of faintly yellowish topaz which he dug out of the old dump. It is broken at both ends and shows the perfect cleavage which is characteristic of the mineral. I believe this to be one of the most interesting discoveries yet made in the East Hampton-Haddom Neck area.

"The Tollgate Quarry in Middletown Conn., has been abandoned. I was fortunate in getting there just after the last work was done. A considerable amount of black sphalerite had been exposed in a wall of the pit which was composed of almost pure white quartz. Nearly solid masses of the mineral, up to three by four inches in size, were collected. Sphalerite had been known from the locality before, but not of such high quality.

"An attempt is being made to organize a mineral club in this part of the state."—letter dated Sept 5, 1956, from Richard Schooner, P.O. Box 215, East Hampton, Conn.

DELAWARE—"In the March-April 1956 R & M, you asked for information on Delaware. My husband and I are still rank amateurs at this business, but since we do get to Delaware frequently visiting relatives (we were born and raised there) we have a chance to pick up specimens. The terrain consists mostly of sand, but all sorts of rocks of pebble size are to be found on the various beaches along the Delaware Bay from Dover to Lewes. We have found fairly nice specimens of fossil rock at Bowers Beach near the mouth of St. Jones River, but the stoniest beach of all is Fowlers Beach below Milford. It is remote, no cottages, and is used only as a launching place for rowboats during fishing season. Perhaps that is why it is stonier than the others, at this time.

"The best way to find Fowlers Beach is to drive south on Rt. 14 and about 5 miles below Milford ask a native for directions. (It is shown on an Esso map of Chesapeak Bay region.)

"The enclosed specimens came from this beach (Fowlers) and are by no means a complete list of all varieties to be found there. I was looking for fossil rock and gem stones when I collected these.

"I will be glad to cooperate with you sending you specimens from various sections of Delaware, if you will give me more specific information as to what you'd like to have."—letter dated Sept. 6, 1956, from Mrs. Robert R. Reynolds, 470 Stocksdale Rd., R.D. 2, Glenarm, Md.

Nine specimens, all pebbles, were received. They consisted of black basanite, milky quartz (very nice), smoky quartz, colorless rock crystal, red jasper, red quartz, brownish quartzite, gray petrified coral in gray chert, and gray petrified brachiopod in gray chert.

Fowlers Beach is in Sussex County, Delaware, on Delaware Bay.

FLORIDA—At the 6th Annual Convention held in Baltimore, Md., last September we met many of our subscribers and saw many fine minerals. Joseph C. McClure, 825 Sharar Ave., Opa Locka, Fla., had some lovely tumbled black chalcedony. This chalcedony is found in the coral geodes at the famous locality on Hillsborough Bay near Tampa, Hillsborough Co., Fla. Two specimens, which we consider very choice and most attractive, were given us by Mr. McClure.

Another specimen given us was a 2 inch loose, gray petrified oyster shell which comes from a new locality near Tampa that Mr. McClure had discovered accompanied by Geo. and Mildred Williamson of the Rock & Shell Shop, 2036 S.W. 57th St., Miami 44, Fla. These fossil shells are very interesting and are the finest we ever saw. A larger specimen, 2 x 4 inches, was sent us later which is of even better quality than what we saw at the Convention. It is always a pleasure to see and examine new finds.

GEORGIA—The following note comes from Milton L. Reiner, 103 Camellia Circle, Warner Robins, Ga.

"I have some rock stories of Georgia for you if I ever get 'on the ball' and send them to you. The reason I have delayed is in trying to get pictures to accompany the stories.

"We have a local oddity which they call Indian paint pots but as far as I can determine they are a type of hematite geode with various colors of powdered sand in the centers.

"If you are ever down this way I'll take you to some of our interesting localities."

The Indian paint pots may be of the same type as those described in this department under Alabama.

IDAHO—Some of the finest anglesite xls ever found in Idaho come from the Hypotheek lead mine near Kingston, Shoshone County. The anglesite is found in cavities of galena as colorless, perfectly transparent, and exceedingly brilliant crystals.

ILLINOIS—From Argenta, Macon Co., Ill., we have some calcite specimens that were sent in by Lawrence Flaugher, Argenta, Ill. One is a colorless, coarse xline mass of calcite in brownish, fine xline limestone. The others are small, white cleavages in the brown limestone.

"The calcite comes from the Friends Creek area in Macon County in central Illinois The area is about 11 miles northeast of Decatur on Ill. State Route 48, near the little town of Argenta. Many small, loose xls are also found here."—on label.

INDIANA—"Trisoctahedral xls of fluorite, sherry-wine to dark brown in color, occur in four limestone quarries around Columbus, Bartholomew Co., Ind."—so we were informed by Jack Hoppinger, 11720 Edgewater Dr., Lakewood 7, Ohio, whom we met in Baltimore last September at the 6th Annual Convention of the Eastern Federation.

IOWA—"Am mailing you a couple of samples of onyx, found in a limestone quarry on hiway #67 about 20 miles north of Clinton, Iowa.

"This quarry is about 3 miles north of the junction of hiways #67 and #6

just west of Sabula, (Jackson County), Iowa.

"Found 4 veins of onyx, 3 very narrow and one that varied from 1 to 4 or 5 inches wide, with a 1 inch vein of calcite, pure white, alongside of it.

"It was all pretty much fractured in the blasting of the limestone.

"This was found by my daughter, Mrs. R. G. Hays of Des Moines, Iowa, and myself one day this summer as we were prospecting the pit for micromount crystals.

"As far as we know, this is the only onyx found around this neck of the woods, if any Iowans know of any other deposits in Iowa, I would be glad to hear from them.

"We also find some nice Lake Superior agates around here, all colors and with eyes, tubes, and also once in a while a sagenite."—letter dated Oct. 29, 1956, from I.V. Brown, 2123 W. Court, Clinton, Iowa.

From the quarry in Jackson County near Sabula, Mr. Brown sent in two specimens of banded white and brown onyx (calcite) each with one face polished. These are attractive specimens and in addition fl. lemon-yellow under the long wave.

A 2 x 2 inch specimen of brownish, banded agate from around Clinton (Clinton Co.) was also received. This is a finely banded agate (fortification agate) that should take a beautiful polish; it is a waterworn pebble.

KANSAS—At the Ross limestone quarry near Ottawa, Franklin Co., Kansas, some very beautiful calcite xls may be found. The calcite is of two generations. The first generation consist of very crowded and intergrown xls that usually are coated with a mineral film which gives the xls an iridescent play of colors. Perched on top of these xls is the second generation calcite which is in colorless, well formed xls.

KENTUCKY—The following letter, dated Sept. 21, 1956, comes from John L. Deney, 313 Sauganash, Park Forest, Ill.

"First let me say that I enjoy R & M very much but like many of your readers I find one fault—it should be published more often.

"Recently I returned to work with the Hercules Powder Co. as an explosives salesman after two years in the army. My job affords many opportunities to collect rocks and minerals.

"My army career was spent mostly at Fort Knox (Hardin Co.), Ky., and I can give collectors in that vicinity a few tips on where to look for interesting specimens.

"Geodes up to 10" in diameter containing any or all of the following: quartz xls, calcite xls, and chalcedony linings, can be found just off highway 31 W in a stream about 10 yards east of the highway half-way up Muldraugh Hill between Fort Knox and West Point, Ky.

"Vugs containing doubly terminating quartz xls can be found in railroad cuts on the line running adjacent to highway 31 W on the east side from West Point towards Fort Knox.

"In an old abandoned limestone quarry on the south edge of West Point (Hardin Co.), about 75 yards east of highway 31 W, are many small vugs lined with both colorless and golden calcite xls. In some of the limestone strata near the top of the quarry can be found 'balls' of gypsum up to 12" in diameter containing small 'books' of muscovite.

"As I travel on my new job perhaps I can find more localities for collecting."

LOUISIANA—"I am sending a fossilized plant to you for identification. Mr. J.B. Abington of Grand Cane, De Soto Parish, Louisiana, informs me that this material is plentiful in the vicinity of Grand Cane.

"Though this contains the small quartz crystals common in the petrified wood of De Soto Parish, the structure does not

resemble that of our petrified wood."—letter dated Aug. 19, 1956, from E.A. Ledgerwood, Rt. 2, Box 192, Mansfield, La.

We call the specimen a petrified wood but it may be a fossil plant of some kind. At any rate it is a most interesting specimen. It is a dark gray, streaked with brown, coarse fibrous mass. An odd fact about this specimen is that it is an amygdaloidal petrified wood. The small amygdules, and there are many of them, are lined or filled with bluish-gray chalcedony and many of these chalcedonies are encrusted with tiny rock xls or with drusy colorless quartz. The specimen is 3 x 6 inches in size.

MAINE—"Earlier this fall I found some very interesting uranium specimens at the Fisher quarry, Topsham (Sagadahoc Co.) Maine. Small green torbernite xls on massive feldspar, a second radioactive mineral in small black xls (possible uraninite) can also be found. Only a few yards distance away from the torbernite, I uncovered nearly 300 smoky quartz xls, many showing black spots due to uranium burns. Three large xls were found, the largest was about 5" in length and 3" in width."—letter dated Dec. 14, 1956, from John Raymond, 492 Main St., Westbrook, Me.

MARYLAND—For the following interesting item, dated July 9, 1956, we are indebted to Mrs. Elsie Kane White, 3418 Flannery Lane, Baltimore 7, Md.

"Don't know whether it is an important enough find, but in our July 1956 issue of GEM CUTTERS NEWS, we list a new find for my own Baltimore County, Md. It is a lovely smoky quartz crystal about 6" long."

A copy of the July 1956, GEM CUTTERS NEWS, was received and on page 2, is the following item, captioned "New Find—Smoky Quartz Crystal—Baltimore County, by Mrs. Frank A. Collins, Timonium, Md.

"Knowing we are rock collectors, my nephew, Donald Burton, aged 9, came running to us on a recent visit to show us what he had found, asking if it was anything worth keeping. He told us he was riding on a tractor his father was using to disc a field and noticed the rock before they got to it. The discs of the tractor covered it up; but he remembered about where it was and on the next round jumped off and uncovered it. It is a large, beautiful smoky quartz crystal, with inclusions.

"I understand this is the first record of smoky quartz crystals found in Baltimore County, and the second in Maryland, some having been previously found in Howard County (according to our member Mr. Charles Smith). The crystal, an especially fine specimen, is valued at about $10."

A second letter, dated Oct. 24, 1956, from Mrs. White, reads:

"Just had a reply from Mrs. Frank A. Collins, whose nephew found the smoky quartz crystal in Baltimore County, Md.

"She stated it was found on the Harford Road, at Greenwood, 2 miles from Glenarm Post Office (Md.)—and *not* near Timonium' as it was listed."

Mrs. White is the Editor of GEM CUTTERS NEWS the official monthly bulletin of the Gem Cutters Guild of Baltimore.

MASSACHUSETTS—"I am enclosing under separate cover a few small specimens of a mineral I found at a road cut on route 8A in the township of Hawley, Franklin Co., Mass. I wonder if the fine black needles are tourmaline? These crystals are so fine that I do not have the proper instruments to examine them closely."—letter dated Nov. 8, 1956, from Ernest H. Fisk, West Chesterfield, Mass.

Yes, the crystals are tourmaline. They are minutely slender, needle-like, striated, radiating crystals on smoky quartz—the tourmaline is dark brown in color but in the aggregate it looks black.

MICHIGAN—John F. Mihelcic, 16543 Appoline, Detroit 35, Mich., sent in the following item, dated Sept. 4, 1956.

"The White Pine mine, Ontonagon County, Mich., is producing copper that is impregnated in sandstone and shale. This is an entirely new source of copper. Attractive specimens may be made by cutting cubes of this material."

MINNESOTA—From a gravel pit at Hopkins, Hennepin Co., Minn., we have an interesting reddish conglomerate whose pebbles are all red - red quartz, red jasper, and red hematite. The specimen was collected by Adolph A. Sidla, 201 - 15th Ave. N., Hopkins, Minn.

MISSISSIPPI—On the Frisco Railroad 3 miles southeast of New Albany, Union Co., Miss., is a good locality for fossils. In the vertical faces of bluffs exposing the Ripley marls, large shells, especially of *nautilus dekayi* and *scaphites* may be found.

MISSOURI—White, massive barite occurs with galena in the mine La Motte lead mine at Fredericktown, Madison Co., Mo.

MONTANA—Gerald Navratil, 243 Farragut Parkway, Hastings on Hudson, N. Y., sent in the following items:

"Libby, Lincoln Co., Mont.—Midas mine property, located about a mile east of the Howard Lake recreation area, was posted in the summer of '56. The mine dump produced bright specimens of scheelite in sulfide-free quartz. This is a shame since many fine pieces of scheelite are scattered about the surface of the dump.

"The Lukens-Hazel (glacier-silver-lead) mine is now in the process of becoming inaccessible to collectors. A mill has been erected at the old dump on the Granite Creek road. Much scheelite in a bright red fluorescent calcite was collected by the writer during the summer of 1955. The property is accessible from Libby via the Granite Creek road. The mine is about 7 miles from Libby."

NEBRASKA—Mrs. Robert Cook, Callaway, Nebr., sent in the following item:

"Concretions of barite containing small but beautiful blue tabular barite crystals have been found in southeastern Banner County, Nebr. (This is the best I can do about location as there is only one town in Banner County—Harrisburg, pop. 72, and there is no road from there to this part of the county. However, you could say the locality is 15 miles north of Dix, pop. 199, which is in Kimball County).

"The largest silica mine in Nebraska is located 5 miles west of Callaway in Custer County."

NEVADA—Howard V. Hamilton, 1340 Crandall Ave., Salt Lake City 6, Utah, sent in the following item."

"Cinnabar in crystals and crystalline masses is being mined at the Cahill mine, north of Winnemucca, Humboldt Co., Nevada. The crystals compare favorably in size and twinning to the fine crystals from China.

"Specimens of the above minerals were observed in the collection of Mr. Alfred M. Buranek, 500 Atlas Bldg., Salt Lake City, Utah."

NEW HAMPSHIRE—"I went to the Lovejoy's gravel pit, near Conway, Carrol Co., N. H., last summer. The large topaz xls seem to be gone for the present, but we got some fairly good feldspar xls in a small pocket.

"There was some green montmorillonite and some fibrous byssolite in the same pocket.

"At this ledge there is a small area of graphic granite around the pockets."—item dated Nov. 2, 1956, from Charles F. Marble, Buckfield, Me.

NEW JERSEY—Another subscriber we met at the 6th Annual Convention of the Eastern Federation held in Baltimore last September was William J. Conley, 15 S. Main St., Mullica Hill, N. J. Not only was it a pleasure to meet Mr. Conley, for the first time, but he delighted us with the presentation of a most interesting specimen of vivianite from his home town. Mullica Hill, Gloucester Co., N. J. is

famous for its vivianite which occurs in cylindrical masses lining belemnites and other fossils. The specimen given us was from a new find made by Mr. Conley; it was a rectangular shaped mass (not a belemnite) whose interior was a mass of dark blue to green translucent vivianite xls—the exterior was encrusted by brown earthy limonite in which tiny quartz pebbles were imbedded. The mineral is offered for sale in this issue by Mr. Conley.

A letter, dated Dec. 21, 1956, from Mr. Conley, reads:-

"I have been collecting for a few years and decided to open a shop in order to get more people interested in mineral collecting and lapidary work.

"We are dealers for Franton Lapidary Equipment, Lapidabide grinding wheels and compounds, for all of South Jersey.

"Our mineral specimens range from local to foreign. The vivianite we are advertising was a lucky find and according to the State Geology Department it contains 2% more iron than the cylindrical type thus changing the crystal structure."

Edwin Skidmore, 253 Central Ave., Mountainside, N. J. favors us with the following item, dated Nov. 16, 1956:

"Thought you might be interested to hear that two weeks ago there came out of the Weldon quarry in Scotch Plains (Union Co.), N. J., calcite crystals completely coated with cacholong opal colored bright blue with chrysocolla and in the massive calcite there was beautiful chrysocolla in thick veins, some spots I am sure large enough to cut (I hope to try it). Also bornite as massive as 1" x 3". Also considerable spots of what appear to be metallic with the texture of antimony (not analyzed as yet). I have never seen anything to compare with this material."

NEW MEXICO—We are indebted to Southwest Developers, Box 881, Abilene, Texas, for two choice specimens from their state. One was a beautiful colorless fluorite cleavage from the Oscura Mountains in Socorro County. The other was a group of lustrous black, fibrous pyrolusite xls in cavity of massive black hematite locality is Lake Valley in Sierra County.

NEW YORK—Our good friend, Osc W. Bodelsen, 219 E. Main St., Mt. Kisco N. Y. comes to our assistance with th following items, dated Oct. 27, 1956:

"The past season afforded us no op portunity for any distant trips but severa visits to some nearby localities yielde interesting results.

"The old abandoned arsenic mine nea Carmel, Putnam Co., N. Y., we found t our surprise, fenced off and a hous under construction. Some good xled arsen opyrite was found, some containing smal cleavages of sphalerite.

"At the Tilly Foster iron mine (als abandoned and at Tilly Foster, near Brew ster, Putnam Co., N. Y.), we came acros a small prehnite with xled drusy surface

"Through the levelling off operatio at nearby Mt. Kisco High School site several minerals were exposed. We note stilbite, heulandite, calcite, apatite but i rather poor specimens. One boulder her showed some interesting looking materia which we could not identify on sight. W knocked off a specimen to take along fo further study. We called this mineral X

"After some chemical and optical test this turned out to be Mineral X—sur enough. It was xenotime. This is presen as platy masses and as four small bu good tetragonal crystals."

Mt Kisco is in Westchester County i southeastern New York.

From near Ellenville, Ulster Co., N. Y. we have some nice selenite xls that wer sent in by Geo. E. Heusser, 4 Spring St. Ellenville, N. Y. They are loose, grayish transparent to translucent xls containing brownish clay—the finest is the largest 2½" long x ½" wide. Among the lo was one fish-tail xl, 1 x 2", also gray i color.

"Selenite from a clay bank betwee Ellenville and Kerhonkson, N. Y. fl. & phos. Purple X, Sylvania black light an strongly phos. when exposed to shor wave."—on label.

NORTH CAROLINA—We cannot help mentioning so often the 6th Annual Convention of the Eastern Federation that was held in Baltimore, Md., last September—it was such a delightful affair attracting collectors from all over America and even foreign countries. One subscriber whom we met for the first time was Gilbert W. Withers, 1405 W. Paces Ferry Road, Atlanta 5, Ga. Mr. Withers had with him a packet of facetted emeralds from North Carolina's famous emerald mine on Crabtree Mountain in Mitchell County.

Though tiny, varying from 2 points up to 10 points, the gems were deep green in color and were cut about 40 years ago (they totalled about 70 carats).

The mine was worked by the American Gem and Pearl Company of New York City (Morris Hanauer, President) for melee (tiny gems) that were used in bracelets, rings, etc.

NORTH DAKOTA—Brick clay occurs at Williston, Williams Co., N.D.

OHIO—Jack Hoppinger, 11720 Edgewater Dr., Lakewood 7, Ohio, sent in the following item.

"Black asphaltum in calcite vugs occurs in the Scott-Cavet limestone quarry at Defiance, Defiance Co., Ohio.

"In the same quarry are found hexoctahedral, also trisoctahedral and dodecahedral xls of fluorite—purple, yellow, white, brown, blue in color."

OKLAHOMA—Last March, Frank R. Lyttle, 411 N.E. 9th St., Oklahoma 4, Okla., sent in an interesting clipping and—it got "lost" on us before we had a chance to use it. Here is part of the clipping that was taken from the Oklahoma City SUNDAY OKLAHOMAN, March 18, 1956, and titled "Beaver County 'Ashes' yield new riches in Minerals," by RGM.

"Always looking for new and bright things in Oklahoma, hub of the whole southwest, RGM visited the volcanic ash deposits near the town of Gate in Beaver County the other day. Mining these mountains of almost pure white pumice-type ash is in the process of being activated by the Stay-Ready Laboratories of Oklahoma City, of which B. M. Salyer Jr. is the head man, this project being a division of the Salyer Refining Co.

"In past years we had been shown through coal mines, zinc and lead mines, salt mines, and asphalt mines, but this was the first time we had been to a volcanic ash mine. It is right on top of the ground in the open spaces of Beaver County.

"The natural material in these volcanic ash deposits goes into the manufacture of many useful items in the home and industry. Some of the finest tooth powder is made of it. It goes into automobile polish. Many kinds of soap use it. Kitchen cleansers and floor-sweeps require it. In these hills the powder is practically free of dirt and rocks, but it is run through a heating process and separator before being packed and shipped.

"R G M is grateful to S. E. Lee of Buffalo and Truman Twombly, W. B. Kite, Ledru Perkins and others in Gate for guiding us to the volcanic ash hills, five miles north of town. In walking and climbing around we got our socks and shoes filled with the white powder, and messed up a pair of pants, but we liked it.

"Geologists have reported that the white cliffs and bluffs near Gate may have the largest deposits of volcanic ash in North America—estimated at 5 million tons."

OREGON—"I am sending you a small specimen which I would like to have identified. It came from the vicinity of Goble, Oregon, and was a filling in fossil bone that I dug out of a bank."—letter dated Sept. 13, 1956, from Geo. G. Oswell, 233 E. Amerige, Fullerton, Calif.

The specimen is a xled golden-brown calcite. Goble in Columbia County, is on the west bank of Columbia River.

PENNSYLVANIA—C. Clayton Hamilton, President of Lapidabrade, 400 Leedom St., Jenkintown, Penn., supplied us with the following item:

"At the Eureka traprock (diabase) quarry at Eureka, Bucks Co., Penn., beautiful butterfly twins of white calcite may be found—some are fl

"Most interesting mineral here, however is micro pyrite which may be found in almost every conceivable form that pyrite occurs."

Lapidabrade, Inc., had a large display of lapidary equipment and supplies at the sixth Annual Convention of the Eastern Federation held in Baltimore last September.

RHODE ISLAND—The following letter, dated Nov. 24, 1956, comes from Tim Moses, Bagy Wrinkle Cove, Warren, R. I.

"Because of the scarcity of reports from Rhode Island I am sending you an article on Rhode Island mineral-hunting. Along with it are some minerals I have collected around Rhode Island in the last few months. I would like very much to join or help start a mineral club in Rhode Island. I am thirteen years old and have been collecting a year and a half now and am especially interested in minerals fom Rhode Island. I'd like to trade some minerals from Rhode Island in exchange for copper and lead minerals.

"Minerals are not so scarce in Rhode Island as out-of-R.I. people may think. Granted our mineral kingdom here is outranged by Arizona or California, but specimens of a good calibre can still be collected. In the Cumberland area malachite, azurite, chrysolite, magnetite in octahedrons and in a titaniferous form called cumberlandite, molybdenite, pyrite, chalcopyrite, epidite, galena, and some native minerals such as copper, gold and silver, range the area. In the Cranston area ilvaite, calcite, gold, pyrite, molybdenite, talc, crocidolite, silver, steatite, allanite and epidote are the main minerals. In the Portsmouth area graphite, crocidolite and many fossils are found. At Limerock clear quartz crystals are found along with allanite and hematite. In southern Rhode Island masonite, fossils and in Scituate gold has been found.

"Quartz crystals abound in Rhode I land from citrine to large clear crystal Milky quartz crystals are extremely lar and beautiful. Quartz coated with hem tite is a very showy speciman. Hunks rose quartz are often found."

"The amphiboles of Rhode Island a actinolite, tremolite, asbestos, and sever chlorites and hornblends. In Portsmou even now after the mineral-rich dum have been cleaned out chrysolite and croc dolite are often found. Very dark gre talc specimens containing pyrite have be taken out of the McLaughlin Ledge ar instead of the usual light green foliate specimens of that area. Fine-grained hor blende has been found on Prudence I land beaches.

"The epidote from Cumberland is ver beautiful especially for micromounts. T crystals form in vugs with pyrite an galena and are really beautiful unde neath the microscope. Magnetite octahe rons usually accompany this very attra tive speciman. I am sending you on of the best for micromounts in my co lection.

"Allanite is easily found in the Lim rock quarry in solid black masses an microscopic crystals. The speciman I a sending should be put under the micr scope also.

"Fluorite is sometimes found in Rhod Island. At Mt. Hope my friend and came across some purple fluorite. So fa that is all of the fluorite we have foun even though amethyst and limonite ar all over the area. The only other fluori I have found so far came from Lim rock and is wavy brown and gray in de cription.

"At the new cut on the Louiquisse Pike, several outcrops are said to hav been found. I will visit the locale with the week.

"This report should give you an ide on the minerals of Rhode Island. A l of the specimens I have mentioned ca be found in the Brown University geolog department, Providence, R. I., where often go."

SOUTH CAROLINA — Some good bluish sapphires have been found in pegmatite 2½ miles northwest of Blacksburg, Cherokee Co., S. C.

SOUTH DAKOTA—"I'm in the process of reading the last issue of R & M from cover to cover, as usual. I just finished World News on Mineral Occurrences and thought you might like an item on South Dakota from our 1950 trip west.

"In South Dakota we saw some lovely petrified fish and shells with a coating 1/8" thick of a greyish, opalescent material like either opal or pearl macre, I don't know which. The actual location I don't know as it seemed to be from a private source. I came across them at a gas station at a cross roads about 10 miles south of Philip (Haakon Co.), S. D., at the junction of Rt. 16 with Rt. 14. At that time it was the only building in sight. There was a rock garden there with many large mineral specimens, too. The fish and what looked like chambered nautilus were from 2 or 3 inches up to 8 or 10 inches in size. A few were separate specimens but most specimens contained both. They were beautiful and I bought a couple specimens for my collection."—letter dated Nov. 9, 1956, from Miss Helen E. Wright, Rt. 4, Box 248, Gainesville, Fla.

TENNESSEE—From the copper mines at Ducktown, Polk Co., Tenn., we have a specimen collected for us by William Dillon, 212 North St., McDonald, Penn. The specimen consists of colorless, radiating tremolite xls in massive, bronzy-brown pyrrhotite. Tiny masses of brassy-yellow pyrite and colorless quartz (some iridescent) also present.

TEXAS—"I enjoyed reading 'Louisiana full of petrified wood' in the May-June 1956, R&M.

"I am sending you a small slab of petrified wood (brownish & white); a slab of black palm (petrified wood) and one of tempskya fern (petrified fern wood—gray in color).

"A small black rock is also enclosed and I would appreciate it if you would let me know what it is.

"All these specimens were found as loose masses on the ground near Whitsett, Live Oak Co., Texas.

"We are in the midst of a drought and the lack of grass and foliage has allowed many fine specimens of rocks and minerals to be found that otherwise might have remained hidden for hundreds of years."—letter dated Sept. 12, 1956, from H. B. Ham, P. O. Box 223, Whitsett, Texas.

The unknown black specimen is a moss agate; so heavily disseminated is the black "moss" in the bluish-grayish chalcedony matrix that the specimen appears to be solidly black.

UTAH—"Over the week end of June 2-3, 1956, I went with a group to Topaz Mountain in Juab Co., Utah. We had an enjoyable trip. I found a few specimens of colorless and wine colored topaz xls, colorless and very pale amethystine quartz, hematite, pseudobrookite and a single crystal tentatively identified as ilmenite. There also is a bit of calcite and hyalite opal (possible uraniferous) that fluoresces a brilliant green under short wave U.V."—item sent in by Howard V. Hamilton, 1340 Crandall Ave., Salt Lake City 6, Utah.

VERMONT—We received two specimens recently from Milton E. Ailes, Box 36, West Danville, Vt. One specimen consisted of dark brown slender translucent tourmaline xls in massive smoky quartz. The other consisted of dark brown (almost black) opaque tourmaline xls also in massive smoky quartz. Both specimens were found in Walden, Caledonia Co., Vt.

VIRGINIA—Bill Carter, 1524 Wellesley Ave., N. W. Roanoke, Va., sent in a specimen with this label—"Taken from cliff at 9th St., S.E. in Roanoke (Roanoke Co.), Va., overlooking Virginian Railway and Roanoke River."

The specimen consists of small colorless calcite xls on brownish compact limestone.

WASHINGTON—Specimens of brassy-yellow pyrite masses in rock heavily stained brown by limonite were sent in by Robert J. Smith, Rt. 2, Box 190, Puyallup, Wash.

"These came from an old copper mine near Fairfax (Pierce Co.), Wash. A good friend, Gail Meeds, and I explored the dump of the mine. We hope to go back with more equipment and explore the deep mine."—note with specimen.

WEST VIRGINIA — The following letter, dated Sept. 1, 1956, comes from Harry H. Newell, 335 S. Harvey St., Plymouth, Mich.

"I was very much interested in the Jan.-Feb. 1956 R&M in regard to the petrified wood found at a mine in Fayette Co., W. Va. (p. 23) which refers to a clipping from the CHARLESTON DAILY NEWS by Bob Jarrell.

"In 1907 I finished five years as assistant to the superintendent of the New River Collieries Co. and New River Smokeless Coal Co. at Rush Run, W. Va., and Red Ash, W. Va., located four miles down river from Thurmond (Fayette Co.), W.Va., on the New River.

"At that time there were several of these stumps in the mines, the old miners called them kettle bottoms and were afraid of them as these stumps frequently fell down without any warning. The bottoms of these stumps resembled old fashioned iron kettles with legs.

"In the slate dumps I found tree branches and large sheets of bark—sometimes the miners would bring me specimens. I had one piece about the size and shape of my wrist that had joint markings like a reed. I had one piece of bark about 2 ft. square, perfectly flat, with rough imprints like a palm bark. I still have some of the bark—the branches and limbs have disappeared in toting them around for 50 years."

WISCONSIN—From Werley, Grant Co., Wisc., we have a specimen consisting of small, dark brown rounded weathered limonite pseudo pyrite (pyritohedrons) on massive milky quartz.

The specimen was sent in by Meredith A. Frey, Mount Hope, Wisc.

WYOMING — Large, reddish-brown almandite garnet xls, some weighing over 2 lbs. each, have been found in a large vein of mica schist near Fox Park, Albany Co., Wyo.

ALASKA—Frank Waskey, Oakville, Wash., sent us some odd specimens: They were limonite (pipestem concretions)—slender, brownish, hollow pipes, 1" long and 1/8" diam.

"Pipestem concretions of limonite pseudo after willow roots. From Nushagak Bay, Alaska, 158° 25' Long., 58° 45' Lat."—on label.

AUSTRALIA—The following letter, dated Oct. 18, 1956, comes from a subscriber in Queensland, Australia, who wishes to remain anonymous.

"It takes three months for R&M to get here. The last number to arrive (May-June 1956) was most interesting especially the article on the laboratory diamonds.

"There is very little gem mining going on in Queensland, Australia. There is a report of another large star sapphire being found here. One should take these reports with a grain of salt.

"Most all the miners in Queensland are after atomic minerals.

"My partner at our opal mines in Lightning Ridge, N.S.W., Australia, writes that the opal field is very quiet. Everyone doing some other work instead of mining opal—which pays better. I hope to be back at the Ridge in about a month.

"We had a very cold winter in Queensland, besides a rat plague and many venomous snakes in pursuit of the rats."

The subscriber sent in two specimens from his Lightning Ridge Mine—one

is a white opal 3/8" in diam. and round, in the center of which is an eye of colorless, transparent opal that shows a beautiful bluish opalescence.

The other is also 3/8" and round but it is a deep black obsidian.

AUSTRIA—Klaus H. Albrecht, Forge Road, Westport, Mass., paid R & M a visit, some few weeks ago, and showed us some loose pale bluish-gray quartz xls, 1½" in length, which he had personally collected. The xls had some odd faces and were found in an old abandoned gold mine at Radhausberg (near Bad Gastein) in S/E Saltzburg Province of Austria. Native gold in quartz used to be found in this mine.

BOHEMIA—Peach-red earthy erythrite mass on dark lead-gray galena, and donated by John S. Albanese, P.O. Box 221, Union, N. J. Locality is the Anna Mine, Pribram, Bohemia, and specimen carries an old label—"Nemeczeck Collection."

CANADA—A very fine, lustrous, lead-gray xline stibnite specimen was donated by John S. Albanese, P.O. Box 221, Union, N. J. The specimen comes from the old abandoned antimony mine near Lake George, Prince William, York County, N.B., Canada. That the specimen is an old one is verified by the original large, old fashioned label which accompanied it—"Cabinet of J. Y. & W. L. Bergen."

COLOMBIA—From Cartagena, a city in northern Colombia, we have two specimens that had been collected for us by W. T. P. O'Gara, 2231 Hurley Ave., Fort Worth 10, Texas, when he was stationed in that country. One specimen is a fossiliferous limestone, buff colored, earthy mass containing fossil shells which appear to be gastropods. The other is a fossil coral, gray in color and fl. orange under long wave.

"Limestone and coral samples from walls of Cartagena, the 'Heroic City.' Collected by W. T. O'Gara, July 20, 1956." —on label.

FINLAND—During March, 1956, H. W. Eckert, prop. of Eckert Mineral Research, 110 E. Main St., Florence, Colo., visited Finland and acquired a large stock of green garnet (uvarovite) xls in chrome ore—some xls up to ½ inch. He also acquired a large stock of gem quality chrome diopside (beautiful green and looks like emerald when cut). Both these minerals come from the famous garnet locality at Outokumpu, Finland.

Eckert Mineral Research had a beautiful exhibit of choice mineral specimens at the 6th Annual Convention of the Eastern Federation held in Baltimore, Md., last September.

GERMANY—Frank H. Skelding, Riverside Rd., Greenwich, Conn., has visited many localities in Europe. On a recent visit to R & M, he told us that in the old workings (adit levels) of the Rammelsberg mine near Goslar in the Harz, Germany, he saw 8-10" masses of hair xls of goslarite.

ITALY—From the magnetite mines at Traversella, Piedmont, Italy, we have a black xline mass of magnetite associated with brassy-yellow chalcopyrite masses and a colorless scheelite xl on greenish talc. This interesting specimen was donated by John S. Albanese, P.O. Box 221, Union, N. J.

MOROCCO — The following letter, dated Oct. 27, 1956, comes from John F. Jedlicka, 3536 E. Fairmount Avenue, Baltimore 24, Md. Mr. Jedlicka is in the navy, stationed in Morocco, and his letter deals with collecting in that country.

"I received your letter of the 18th and here is the information requested.

"Monsieur Charles Pelletier-Doisy and I collected cassiterite crystals at Oulmes. Oulmes is located in central Morocco approximately 60 miles southwest of Meknes.

"We collected trilobites in an exposed road cut about halfway between Rabat and Oulmes.

"On the 24th of September we drove down to the abandoned copper pits at

El Kiar. They are located approximately 60 miles east of Casablanca. Most of the material was massive but we were fortunate enough to collect specimens of native copper and a few micro crystals of malachite.

"Charles and I are planning a few trips now, but lately I have been restricted to our base until the Arabs start behaving themselves again. He will also try to write an article on Moroccan minerals for you as soon as he can get the chance.

"As soon as things quiet down we will visit the vicinity of Souk el Arba du Rharb. This locality is on the road which runs from Petijean to Tangier. I hope to collect specimens of native sulfur and prehnite.

"On the way to or from the above locality we will stop to collect translucid and nearly transparent green cubic crystals of fluorite in the vicinity of Quezzane. This locality is roughtly 30 kilometers west of the road to Tangier and south of the border of the former Spanish zone of Morocco.

"If we are fortunate enough to get some good specimens, I'll send you some."

Mr. Jedlicka has sent in an article on his collecting experiences in Morocco and we will try to print it in this issue. Watch for it!

RUSSIA — Large, greenish-brown prisms of vesuvianite in a pale greenish-gray decomposed rock are found along the banks of the Vilui River near Lake Baikal, Siberia.

One nice specimen was donated by John S. Albanese, P.O. Box 221, Union, N. J. Has old label of Stevens Institute of Technology.

SCOTLAND—For many months we have been printing items on Scotland that were sent in by Sandy Ramsay, 1015 Aikenhead Road, King's Park, Glasgow S4, Scotland. This time Sandy *almost* failed us but he did send in a most attractive calendar full of beautiful pictures in color (Scots Pictorial Calendar-in colour, 1957). Here is a letter from him, dated Oct. 28, 1956:

"My 'letters to be answered' bundle has grown to such huge proportions that I am scared to look a it—no sooner do I get a few answered then a dozen more roll in. I bet you must get extremely tired answering all your correspondents, at least the majority of them, as there are always the few whose writings give one great pleasure.

"Imprimis, I had better answer any relevant question you want answered, so here goes—sorry I haven't a picture of myself with a big specimen. I once had a 30 pound prehnite—it was too big to mail to one of my American friends and too big for me to keep, though it kicked about the back garden for long enough, but now I don't know where it is, probably in someone's rockery. However, I will see what we can do this coming year.

"Re: the panning of gold in our Scottish streams,—it is curious to note that the old time miners in the Leadhills used to salt the streams with pyrites to delude the strangers who came there to pan for gold and it would be interesting to know how many people have vials of 'gold' from the leadhills of Scotland. I will ask Hugh McCallum to get you some of our auriferous sand when next he heads north but, man, gold is awfully scarce here, the work to find it is hard, and the reward negative or nearly always so.

"Boy, if you could get to this country my pal and I would try and give you a real fortnight's touring of Scotland during our summer holidays. We would make you very welcome and you would certainly see the country. All I ask is ample warning of your visit."

SWITZERLAND—Small, dark green penninite xls on drusy, brownish essonite (garnet) xls and both on dark green xline chlorite have been donated by John S. Albanese, P.O. Box 221, Union, N. J. The locality is Zermatt, Switzerland, and the specimen carry an old label of Stevens Institute of Technology.

"Fine m/m material."—on label.

TURKEY—A. G. Parser, Inc., 15 W. 44th St., New York 36, N. Y., had an attractive display of gems and minerals at the 6th Annual Convention of the Eastern Federation held last September in Baltimore, Md. What caught our eye were the extra large specimens of very nice cream-white botryoidal masses of Meerschaum—some up to 12 inches in diameter. These were imported from Turkey by the Parsers and came from the famous clayey deposits on the plain of Eski-sher. Turkey.

Two years ago H. W. Eckert, prop. of Eckert Mineral Research, 110 E. Main St., Florence, Colo., spent two months in Turkey collecting minerals. One of the minerals brought back was maroon-red vanadinite xls which he obtained from a lead-zinc mine in the neighborhood of Eski-sher (meerschaum locality).

Surpassed by no other magazine

Editor R&M:-

I think that R&M is surpassed by no other magazine in its field and I know that I will always be an avid subscriber for years to come. Keep up the good work and good luck for 1957—I know that the 1957 issues will be even better than those of 1956.

Emery A. St. Cyr, USN
Box 71, US FWC Navy 943
FPO, San Francisco, Calif.

Nov. 30, 1956.

R & M is where you find it!

Editor R&M:-

Several years ago while I was tagging claim posts on a mining property about 150 miles southeast of Yellowknife, I came upon a deserted exploration camp. In the camp I found a copy of R&M, dated July-Aug. 1952. This is how I first became acquainted with your most interesting and instructive magazine and now I am a subscriber.

G. B. Wright
% W. W. Moffat,
Yellowknife, N. W. T.
Canada

Oct. 18, 1956

Vitro Enters Field of Manganse Production Formation of U.S. Maganese Corporation Announced

Formation of a new company to produce manganese from domestic ores, and the award of a contract from the General Services Administration to pilot a process for such production was announced in January 1957 by J. Carlton Ward, Jr., president of Vitro Corporation of America.

Joining in the announcement were Philip H. Sellew, president of Sheer-Korman Associates, Inc., and Albert M. Garbade, president of Great Divide Mining and Milling Corporation.

Rhodonite is a highly refractory, manganese-rich ore which exists in large quantities in Colorado. Prior to the Sheer-Korman process, rhodonite has not been suitable for economic exploitation. Laboratory test runs indicate that treatment of rhodonite with the arc makes the ore amenable to manganese recovery by conventional methods.

The new company, U.S. Manganese Corporation, recently incorporated in Delaware, is owned 40% by Vitro; 40% by Sheer-Korman, which has supplied its processes and patents, and 20% by Great Divide, whose deposits will supply the rhodonite ore for production.

Manganese, an important alloying element, is used in the production of steel and is one of our strategic metals. Almost 80% of the manganese produced in the world has come from Russia, India and Africa, with Russia alone accounting for some 40% of the world supply. New sources also have been developed in Brazil.

The United States uses about two million tons of manganese yearly and is forced to import almost 95% of its needs by supply lines vulnerable in wartime. This is because of a lack of conventional domestic ores.

The Vitro pilot plant will open the door to recovery of millions of tons of manganese from plentiful, high-grade, domestic manganese silicate deposits which heretofore have not been amenable to the conventional processing methods. This will make the United States independent of foreign sources in case of war.

Happy to renew subscription!

Editor R&M:-

I am more than happy to renew my subscription to ROCKS AND MINERALS. In my book there's none better.

John Hanson
3624 Stevens Ave.
Minneapolis 9, Minn.

Sept. 11, 1956

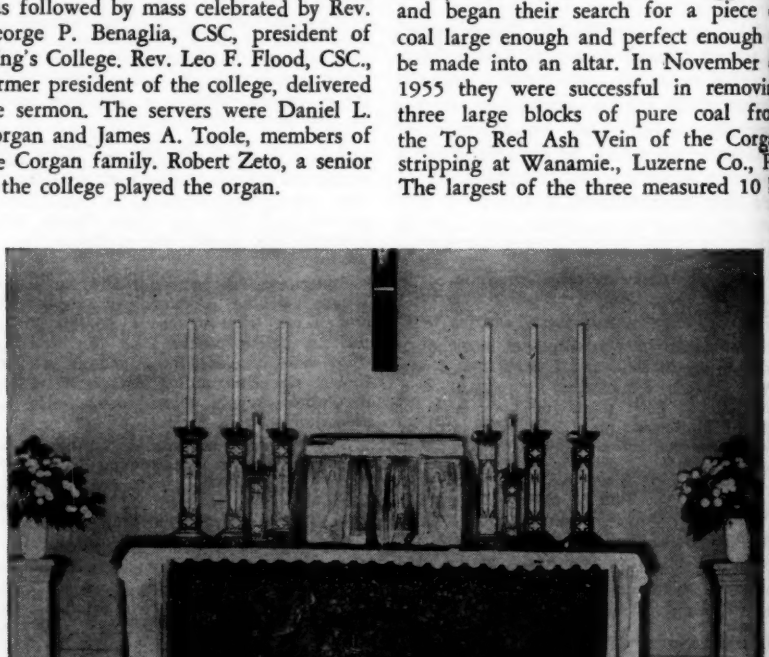
COAL ALTAR IN COLLEGE CHAPEL

An altar of anthracite, installed last week in King's College, Wilkes-Barre, Pa., was dedicated yesterday morning in the college chapel. The dedicatory ceremony was in the form of a private mass for the Corgan family of Kingston, who donated the altar and sanctuary furnishings in memory of their parents, Mr. and Mrs. John B. Corgan, Sr.

The services opened with the blessing of the altar and tabernacle by Msgr. Francis A. Costello, VF. The blessing was followed by mass celebrated by Rev. George P. Benaglia, CSC, president of King's College. Rev. Leo F. Flood, CSC., former president of the college, delivered the sermon. The servers were Daniel L. Corgan and James A. Toole, members of the Corgan family. Robert Zeto, a senior at the college played the organ.

The coal altar, believed to be the only one of its kind in the world, is made from a single block of anthracite weighing approximately 4,200 pounds. On the face of the altar is carved the seal of the Congregation of Holy Cross.

The idea of a coal altar was conceived in the mind of Rev. Father Flood in 1953. He thought that such an altar would be most fitting in King's College in the heart of the anthracite region. The Corgan family became interested in the suggestion and began their search for a piece of coal large enough and perfect enough to be made into an altar. In November of 1955 they were successful in removing three large blocks of pure coal from the Top Red Ash Vein of the Corgan stripping at Wanamie., Luzerne Co., Pa. The largest of the three measured 10 by



Coal Altar, a 4,200 lb. piece of anthracite, dedicated Sunday morning, October 21, 1956 in the chapel of King's College, Wilkes-Barre, Pa.

Photo Courtesy King's College

4 by 3 feet and weighed about six tons. To remove the coal, so far beneath the surface, normal strip mining methods of drilling and blasting had to be suspended, so that after the draglines had removed 100 feet of overburden jackhammer drilling was done and small quantities of dynamite were used to break the coal loose. The piece was then brought to the surface by a dragline.

In June the block of coal was sent to the French Creek Granite Company, St. Peter's Pa., a company noted for the cutting of limestone and granite. Although the firm had no experience in cutting anthracite, it agreed to try to cut the top and bottom of the coal flat and parallel. A month later the work was done and the coal returned to Wanamie. During August and September, Edgar Patience, a specialist in making trophies and other articles of anthracite, prepared the coal for use and engraved the seal.

—*Wilkes-Barre Record,*

Wilkes-Barre, Pa., Mon. Oct. 22, 1956.

A Note about quicksand.

For a number of years I have subscribed to the ARIZONA FARMER as I am quite interested in some phases of Arizona agriculture and horticulture. Among the more interesting features of the paper have been OLD-TIMER TALES. In the last issue was the enclosed clipping that I thought might be of interest to you. Mr. Parkman has described many very interesting events and experiences of his own and of others that he knows about.

The clipping is from the Sept. 29, 1956, issue and is devoted entirely to quicksand - 2¼ columns. The author, J. H. Parkman, relates many anecdotes about quicksand occurrences in Arizona. He says:

"Quicksand is light, fine-grained sand that is carried along in the stream until it comes to a spot where there is little current. There it settles to the bottom and builds up a sandbar. Since it is so impregnated with water, everything of any weight promptly sinks below the surface."

Trip to Climax, Colo.

Editor R & M:

On July 14, 1956, the Colorado Mineral Society made a field trip to the Climax Molybdenum Mine at Climax, Colorado. This is the largest underground mine in the U.S., having a daily output of 30 thousand tons of ore per day. The percentage of molybdenum in the ore is quite low and it is interesting to see the extraction process. The various materials are recovered in the form of fine sand. This is logical, since the ore is finely crushed when it first goes into the mill. The molybdenite is separated by flotation using pine oil, and the other minerals (by-products) are separated by various rocker tables, gravity devices, and magnetic devices. I am sending you a sample of 8 of the different materials which are recovered. When one realizes the importance of molybdenum in the steel industry, and the fact that the U.S. produces 80% of the world's supply—60% from the Climax mine, and 20% from Utah—this one mine begins to take on a position of strategic importance. On the July field trip, a group of the men were taken thru the workings of the mine, the entire party had a wonderful dinner in the mess hall, and then the entire party was conducted thru the mill. A very interesting talk was given by Mr. Robert A. Navias, the company geologist, and a general question and answer session followed. The trip was arranged thru Mr. Don Stephens, the Public Relations Director.

Calvin B. Simmons
5541 W. 10th Ave.
Denver 14, Colo.

Sept. 24, 1956

The sample of materials, all powdered and mounted in round cavities in cardboard and covered by Scotch tape are: molybdenum, monazite, topaz, black mineral, pyrite, tin, tungsten, and raw ore. These sets are prepared by Troop 71, Boy Scouts of America, Climax, Colo., world's highest district, elevation 11,320 feet.

A nice photo of Climax and its surrounding area was attached to the cardboard—a very attractive souvenir.

Each issue better than the last!

Editor R&M:-

Please find enclosed my check for $6.00 to renew my subscription. Each issue seems to be better than the last but this is hardly likely as they are all good, so the conclusion is that you are getting out a fine magazine for the mineral enthusiast.

C. W. Sandifer
88 Edwin St.
Ridgefield Park, N. J.

Nov. 18, 1956

MAXWELL SOMMERVILLE ENGRAVED GEMS ON DISPLAY

After many years storage in the vaults of the University Museum, Philadelphia, the Maxwell Sommerville collection of engraved gems is going to be placed on exhibition from November 30th, 1956 to March 31st, 1957.

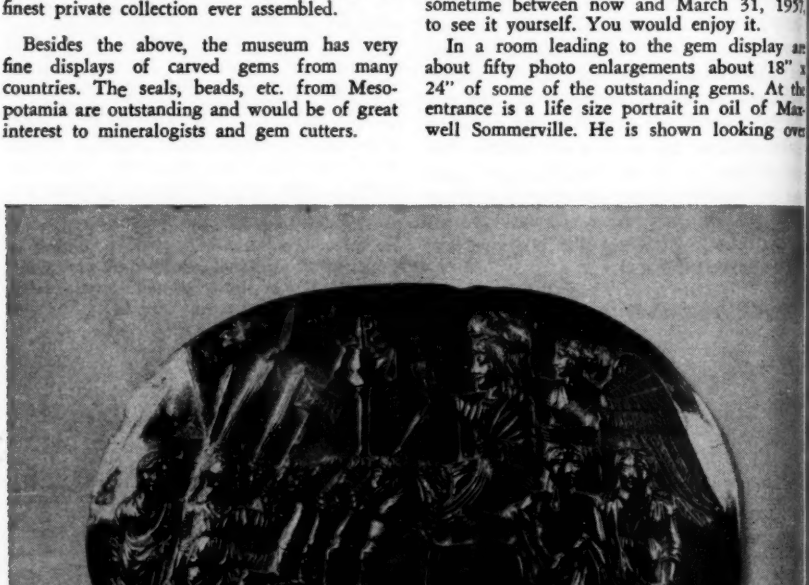
The collection is mentioned in Dake's Quartz Family Minerals," because most of the two thousand or more gems are made from many varieties of quartz. Yesterday (Oct. 25th) I was privileged to a preview of this collection, which Dr. Dake says is without doubt the finest private collection ever assembled.

Besides the above, the museum has very fine displays of carved gems from many countries. The seals, beads, etc. from Mesopotamia are outstanding and would be of great interest to mineralogists and gem cutters.

Enclosed is a catalogue of the special exhibition of the Maxwell Sommerville collection of engraved gems, now being shown at the University of Pennsylvania Museum. The photo enclosed is actual size of the cameo, number 259 in the catalogue.

I worked several days helping to prepare this exhibit and went last Saturday to see the finished job. Your readers, I am sure, would be glad to see this show and I hope you can find time to come to Philadelphia sometime between now and March 31, 1957, to see it yourself. You would enjoy it.

In a room leading to the gem display are about fifty photo enlargements about 18" x 24" of some of the outstanding gems. At the entrance is a life size portrait in oil of Maxwell Sommerville. He is shown looking over



A fine engraved cameo, No. 259, in the Somerville Collection. The specimen is a brown sardoynx and the scene represents the triumph of a Christian emperor, perhaps Constantius (A.D. 306-337) or one of his sons.

a group of gems. In a glass case alongside the portrait, the gems shown in the picture are displayed. Among these is the Chrysoprase cameo mentioned in "Quartz Family Minerals" page 141—This is said to be the largest engraved Chrysoprase in existence.

Beside this wonderful exhibition of engraved gems there is much of interest to amateur lapidaries in other galleries in the museum, especially Babylonia on the second floor. Here are specimens of the lapidary arts dating from about 2500 B.C. showing the amazing skill of ancient craftsmen, using primitive tools and methods. The cylindrical seals are especially interesting. These were made from agate, clear quartz, carnelian, lapis lazuli, etc. These seals were cut to the owners' specifications as to design and inscriptions. The kind of stone chosen was important: Magical powers ascribed to the various stones decided which of the many stones would be used. The seals all have a hole drilled through the center and were worn suspended round the neck partly to act as a talisman and ward off evil or sickness and partly to be handy to impress on moist clay tablets which might be a friendly letter, a deed or agreement or bill of goods. Fortunately these seals were buried with the owner when he died, so that a great many are now in museums shedding much light on the way of life in those ancient times.

Royalty and nobility were buried with all their personal ornaments. In the Museum the personal belongings of a Queen are shown. These were found in her tomb and now make a very interesting display. There are hundreds of beads made from carnelian, agate, quartz, lapis lazuli, and gold. They have been restrung and show the beautiful designs and color combinations by these ancient lapidaries.

A cup about one quart capacity made from obsidian is a work of art. Another one from lapis and one from gold and many other things are immensely interesting and should be a challenge to the present day lapidary with all his modern equipment. Something for him to try to equal. To all members of the "Rocks and Minerals" family within reasonable distance of the Museum, I say the Maxwell Sommerville collections and the other collections in the museum is a MUST!

Harold Poole
315 Wadsworth Ave.
Philadelphia 19, Pa.

A 36 page catalog, 6 x 8½ inches in size, and listing 650 items in the Sommerville collection, was sent us by Mr. Poole.

GREAT SMOKY QUARTZ CRYSTAL EXCAVATED

Word by cablegram has just been received by Captain George W. Owens who conducts the Amateur Lapidary column of ROCKS AND MINERALS concerning the discovery in early November, 1956, of a fine huge smoky quartz crystal. The discovery was made by agents of Mr. Phill Hyung Woo of Pusan, Korea. Mr. Woo is attempting to organize a small company for the purpose of locating minerals suitable for collectors. He has been engaged in this business for a short time and has shipped some fine amethyst XLS to Captain Owens.

The fine transparent smoky crystal just recovered has a weight of slightly over one hundred Kilograms, has a height of over 85CM with a total circumference of over one meter. This is believed to be one of the largest crystals recovered in the past several years. This crystal, as reported by Mr. Woo, is of facet quality.

As mentioned before, Mr. Woo is attempting to established a small company for the location of fine minerals suitable for the collector. To enable his name to become known to both dealers and to collectors alike, Mr. Woo has decided to sell this large smoky quartz crystal to the highest bidder. Captain Owens has kindly consented to act for Mr. Woo in this connection. He will accept all bids, forward after translation to Mr. Woo, and will hold any money received from the highest bidder until that person or firm has received the crystal. In this manner both Mr. Woo and the lucky bidder will be protected. According to Captain Owens, bids should be made as soon as possible. The highest bidder will be notified within 30 days after date of issue of ROCKS AND MINERALS. Anyone wanting additional information please contact Captain Owens, Route 2, Box 266, B-15, Jacksonville, Ark., and please include a stamped self addressed envelope.

A PETRIFYING SPRING IN CALDWELL'S CAVE, W. V.A.

Have you ever heard of a petrifying spring, one whose waters will coat objects if left immersed for some days? One such spring is the Petrifying Springs of St. Alyre, France. These springs are not only celebrated for their beautiful lime incrustations but if articles are deposited in them, they will, after a time, become coated with a deposit of finely granular snow-white calcite.

It has just been brought to our attention that a petrifying spring exists in West Virginia, in the Caldwell Cave in Mercer County; discovered by one of our subscribers, Bill Carter, 1524 Wellsley Ave., N. W. Roanoke, Va. Here is Mr. Carter's letter, dated Sept. 4, 1956:

"I am sending you a stalactite specimen from West Virginia. This specimen was removed from a small pool in Caldwell Cave, which lies about 9 miles southeast of Princeton (Mercer Co.), W. Va. (near the Virginia line). On my first visit to this cave, almost two years ago, I noticed a small piece of stalactite lying in a pool. Having nothing with which to remove it, I thought I'd get it on my next visit.

"A year later I entered this cave again and to my surprise the formation was almost out of sight, grown over by ¼ inch white crystals. This gave me an idea and I wanted to make an experiment. I placed three pieces of stalactite into the pool and left. About 4½ months later I returned to claim my trophies (one of them I'm sending to you).

"On Sept. 11, 1956, I placed six pieces in the pool and hope to return later for them.

"There are three small pools in this cave but only one forms the crystals. This is a drop cave with four drops to use a rope on. The pools are located past the first two drops. Interesting specimens may also be taken from the other two pools. When held in a dim light the specimens will sparkle.

"I thought cave growth took a very long time to form so this very quick growth has me confused. Are they calcite crystals?"

The specimen received is truly a remarkable one from the standpoint of its quick growth—4½ months: And it is a beautiful one, too! It is a 4 inch brownish stalactite, 1½ inches in diam., and almost completely encrusted by a thick growth of coarse, snow-white sparkling drusy calcite crystals. A puzzling feature of the encrustation—only the cylindrical surface is encrusted, the top and bottom show no encrustations unless Mr. Carter had trimmed them.

A letter dated Oct. 26, 1956, from Mr. Carter in reference to the encrustation reads:

"I did not remove anything from the specimen sent you. It is possible that some of the crystal coating was broken off in the process of transporting the specimens from the cave to my home. I have examined the specimens in my possession and they too are coated only on the cylindrical surface."

Eastern Federation of Mineralogical and Lapidary Societies

The Seventh Annual Convention of the Eastern Federation of Mineralogical and Lapidary Societies will be held on August 29, 30, 31, 1957. This year's event will take place at the Chamberlin Hotel, Old Point Comfort, Virginia, with the Gem and Mineral Society of the Virginia Peninsula acting as host.

Plans for a bigger and better convention than ever before are now underway. There are plans to cooperate with the Jamestown Festival celebrating our country's founding 350 years ago. In addition to the wonderful exhibitions at the hotel, there will be sighseeing for all the family. Girls representing each club will compete for the title, Queen of Gems", and the contestants will be officially entertained by hostesses representing the Jamestown fete.

Plan now to attend the big celebration in Virginia next August. It will be an opportunity for a delightful weekend or a wonderful vacation.

HUNTING MINERALS IN THE SOUTH

Rev. B. M. Heald, New England Sanitarium and Hospital, Melrose, Mass. . . .

I have read with interest the article "Hunting Gold in Maine" in the July-August 1956 issue of R and M by Ruth H. Wentworth, because I found five flakes of gold in Swift River, Sunday, Sept. 16th, 1956. Am only sorry they did not find a bigger supply. Better luck next time. I plan to go up there next Summer again, and we may meet on the banks of the River.

Mrs. Heald and I covered a 5,800 mile tour of the Southland last winter. We went in search of Southern minerals and possibly gems. I happen to be vice-president of the "Boston Mineral Club" and good members told me that we should go West to find a paradise of minerals. Upon our return May first I displayed our specimens at the May club meeting, and now they want to go South. I am glad to pass along to the readers of R & M the localities where we found specimens.

First, we found beautiful pseudomorphs of petrified coral on Tampa Bay, Fla. Go around the Bay at Ballast Point. I can recommend, as one who knows and very helpful to collectors; Mr. K. R. Mackintosh, 8409 El Portal Drive, Tampa, Fla. These specimens are fluorescent under the infra-red light.

Then near Pine Tree Valley, Georgia, we found beautiful beryl and rose quartz. The gem quality rose quartz is superb. We found beryl crystals and have twelve formations measuring from three inches in diameter graduated down to three quarters of an inch. Pine Mountain Valley is about fifteen miles west of Warm Springs, Ga., where the Little White House is located.

From there we went to Tate, Ga., 60 miles north of Atlanta. Here we found marble quarries much like our Proctor, Vt., marble quarries, only Tate marble is red, green, pink, yellow and to add to its beauty one may find sparkling pryites scattered through the colors. These quarries may not be very scientific to a collector, but they are fantastic.

On our return home we entered the Skyline highway at the southern end, and to our amazement we found the highway ballast made of matrix filled with small garnets. So rich was this matrix with garnets that it looks pink. This is found about 40 miles north of Roanoke, Va. Our garnet specimens look much like ruby filled matrix.

Anyway when we drove into our home garage our "56 Nash Rambler was riding in a 45 degree angle. Our friends laughed at the angle. I hope readers of R & M, who may go South for the winter will have luck.

American Federation of Mineralogical Societies

THE PRESIDENT'S LETTER

As we set sail on the sea of a new year, let us pause long enough to rededicate ourselves to our hopes and desires.

The finest resolve may vanish into thin air unless it is accompanied by sturdy application and a continuous effort unbiased by personal gain.

Let us be ever mindful of our responsibility to our duties as officers and lay members of one of the finest groups of men and women ever to band themselves together under the name of a hobby.

I wish to pay tribute to the fine men and women that officered and guided our American Federation through these ten years of our existence. It is from these members that we must take our determination to continue to build on the solid foundation they laid down. Service to the Regional Federation is our only excuse for existence and it is with this in mind that I have appointed the committees on Mineralogy, Geology, Lapidary, Nomenclature, Rules for Exhibits and Judging and Slides programs. These committees may be expanded to include other subjects. I have announced a return to the custom of an Essay Contest for Juniors on some suitable subject with proper prizes.

These activities, plus our Trophy program, make up the program of 1956-57.

Please remember that the President's office is open to your letters and your advice.

Harry L. Woodruff
3003 M St., N.W.,
Washington, D. C.

THE SAND COLLECTOR

CONDUCTED BY PETER ZODAC
PEEKSKILL, N. Y.

Dune sand from Grand Canyon, Ariz.

"Enclosed, some sand from the dunes above the river level from the bottom of the Grand Canyon. Took the family and hiked down there the week before Easter. Stayed overnight at the bottom and hiked out the next day. Hard work, but well worth it.

"I picked up the sand right along the Bright Angel Trail just above the highest point of the river (Colorado River), so it is true blow or dune sand and not river sand. Had I thought of it I would also have obtained some of the river sand from a bar near the trail before it goes up Bright Angel Canyon. Would probably have been slightly different.

"Anyway the sand is from the south side of the Colorado River and just opposite Bright Angel Canyon in Coconino Co., Arizona.

"Have enclosed a map of the Grand Canyon with the locality for the sand marked with an X.

"If there are any other sands from the west that you especially want, please let me know and I will try and remember to pick them up when possible. I get around quite a bit and would be happy to do it."—letter dated May 30, 1956, from Ralph W. Dietz, Consulting Editor GEMS AND MINERALS, 106 B Bard, China Lake, Calif.

This item should have been printed long before this but the sand got mislaid before it could be examined. Please pardon us, Mr. Dietz. We will try to be more efficient in the future.

The sand sample is very fine grained and pinkish. It consists of pinkish garnet, quartz (colorless, pinkish, smoky), and a very small amount of black magnetite.

Quartz sand from Beebe, Ark.

This is a very fine grained, light brown sand. It consists chiefly of light brown quartz (stained brown by clay) and brown clay. A tiny amount of black magnetite and silvery muscovite also present.

"From Hwy 67, west of Beebe, (White Co.), Ark."—on label of sample that was sent in by Glen E. Kiser, Douglass, Kans.

Creek sand from Webber Creek, Calif.

From Webber Creek, El Dorado Co., Calif., we have a sand sample that was collected for us by Peter Mohlsick, 2830 Darwin St., Sacramento 21, Calif. The sample is a coarse, brown sand consisting of quartz (smoky-brownish), slate (black-red), brown clay, and some dull black magnetite.

Beach sand from Longbeach, Fla.

Longbeach, in Manatee Co., Fla., is on the Gulf of Mexico. From this beach we have a sand sample that was sent us some few months ago by Mrs. John Roder, 12224 Florida Ave., Tampa 4, Fla. The sample is a fine grained white sand consisting almost entirely of colorless quartz except for a small amount of sea shells (white, pinkish). The sea shells fl. pale yellow under long wave.

"We were near Sarasota, Fla., today and by going 35 miles further we ended up at the end of Long Boat Key. Found a P.O. there (Longbeach, Fla.) That sent me thinking back to something I had read in R&M. Could not say for sure but I got a sample of sand 3-4 blocks from

the P.O. right at the edge of the waves as they were coming in. When I got home I read again and a sample is coming your way."—note with the sample.

Mrs. Roder refers to the item on beach sand from Long Beach, Wash., which appeared in the Nov-Dec. 1954, R&M, p. 611. In the item mention was made that the post office directory lists Long Beach for California, Florida, Mississippi, New York and Washington and that we had samples of beach sands from each locality except Florida; now, thanks to Mrs. Roder, we have a sand sample from Longbeach, Fla.

Beach sand from Beverly Shores, Ind.

"I am sending you a sand sample that was collected from a beach on Lake Michigan at Leonard's Cabins and Hotel, Beverly Shores (Porter Co.), Ind., 4 miles from Michigan City.

"Northern Indiana's finest resort."—on label with sample that was sent in by Tomasz J. Turley, 2149 N. Bell Ave., Chicago 47, Ill.

The sample is a medium grained, brownish-gray sand. It consists chiefly of quartz (colorless, smoky, brownish, brownish chalcedony, brownish jasper) with smaller amounts of black magnetite, black basalt and white lake shells (shells fl. pale yellow under long wave).

Gypsum sand from Covingston, La.

Donald Stockwell, 1413 Prentiss Ave., New Orleans 22, La., donated this sample. It is a cream colored, fine grained sand consisting entirely of fine grained, colorless, glassy gypsum.

"The sand is from the Tchefuncte River, near Covington, St. Tammany Parish, La."—on label.

Quartz sand from Nashville, Mich.

From Nashville, Barry Co., Mich., we have a sand sample that was sent in by Harry A. Laurent, P.O. Box 345, Nashville, Mich. The sample is a fine grained, gray sand consisting chiefly of quartz (colorless, smoky, brownish, red chalcedony), gray to brown quartzite and white snail shells plus a tiny amount of black magnetite.

"Sand from my well."—on label.

River sand from Greenville, Miss.

Here is a sand sample that was sent in by an anonymous subscriber. It is a fine grained, gray sand consisting chiefly of quartz (colorless, brownish, reddish) with some greenish epidote, pinkish feldspar, colorless muscovite, and black magnetite.

"Mississippi River sand, collected at Old Ferry Crossing, 3 feet above water level, east side of river, Greenville (Washington Co.), Miss."—on label.

Sandstone sand from Plato, Mo.

Glenn E. Kiser, Douglass, Kans., sent in this sample which is a coarse, dark gray sand. It consists chiefly of dark gray sandstone with minor amounts of quartz (smoky, white chert) and a tiny amount of blackish magnetite.

"From Hwy 32, S/E of Plato (Texas Co.) Mo. In Mark Twain Forest."—on label.

Cave sand from Millerton, N. Y.

Lawrence O. Chapman, 41 Church St., Franklin, N. J., is keenly interested in caves and has explored many of them. One of the caves that he has explored is the Indian Oven Cave near Millerton, Dutchess Co., N. Y. From this cave he has collected a sand sample for us that is coarse grained and dark gray in color. The sand consists chiefly of dark gray phyllite with minor amounts of quartz (smoky, milky).

"Sand from foot of waterfall in Indian Oven Cave, 2 miles north of Millerton, N. Y., on Route 22. Stream from a spring above cave flows into cave."—on label.

Creek sand from Corundum Hill, N. C.

Some few months ago we received a sand sample from W.M. Johnson, RFD 6, Knoxville, Tenn., who collected it at the famous corundum locality on Corundum Hill, Macon Co., N. C. The sample is a coarse, very dark gray sand. It consists of greenish chlorite, black lustrous chromite xls, gray to dark gray corundum, pink to dark red garnet, black magnetite, whitish muscovite, smoky quartz, gray to green talc, and tourmaline (opaque black, also dark green striated xls.)

"Sand from creek on Corundum Hill, about 6 miles east from Franklin, N. C." —on label.

Quartz sand from Hawkins, Texas

We are indebted to Mrs. N. F. Stringfellow, Box 383, Hawkins, Texas, for this sand which is fine grained and gray in color. The sand consists almost entirely of quartz (smoky, colorless), except for a very small amount of silvery muscovite flakes.

"Wilcox Sand. From deep water well drilled on Fitts farm, near Hawkins, Wood County, Texas.

"This sand carries water in this area. Water sand (Wilcox) was encountered at about 502-544 and 587-608 ft.

"This sand carries oil and/or gas in certain parts of Oklahoma, but is usually encountered at a greater depth."—label with sand.

Topaz sand from Topaz Mt, Utah

From the famous topaz locality, Topaz Mountain, Juab Co., Utah, we have a sand sample that was sent us by Geo. G. Oswell, 233 E. Amerige Ave., Fullerton, Calif.

The sample is a fine grained, gray sand. It consists chiefly of gray rhyolite and smaller amounts of brilliant, colorless topaz, colorless glassy sanidine that shows a bluish opalescence, and tiny amounts of black bixbyite and dull black magnetite.

"Topaz sand from Topaz Mt., Utah., about 50 miles N/W of Delta, Utah."—on label.

Oolitic sand from Lapush, Wash.

In almost the extreme S/W corner of Clallam County, Wash., is the small town of Lapush, on the Pacific Ocean. From Lapush we have a sand sample that was sent us by Glen E. Kiser, Douglass, Kans. The sample is a fine grained, dark gray oolitic sand consisting entirely of dark gray calcite concretions (all nicely rounded).

"The gray oolitic sand from Lapush, Wash., is a real oddity as to shape. This Lapush, they tell me, is the most westerly town in the U.S. where there is a newspaper, not that that means anything but there is not much more west.

"The sand is from the shore of the Pacific Ocean, Lapush, Wash."—on label.

Obsidian sand from Yellowstone N.P., Wyo.

Geo. G. Oswell, 233 E. Amerige Ave., Fullerton, Calif., has sent in another interesting sand. This sample comes from the west shore of Yellowstone Lake in Yellowstone National Park County, Wyo.

The sample is a coarse, black sand. It consists chiefly of black, lustrous obsidian with small amounts of smoky quartz and dull black magnetite.

Gold sand from Nushagak Peninsula, Alaska

Frank Waskey, Oakville, Wash., who has spent many years in Alaska, delights us with this sand sample from Alaska whose label reads: "Beach sand from Nushagak Peninsula, east side, 158° 40' Long.; 58° 30' Lat. If your patience holds, a color or so of Au (gold)."

The sample is a medium grained, black sand. It consists chiefly of lustrous, black magnetite with some green epidote, black ilmenite, smoky quartz, and at least 5 good size gold flakes.

Ilmenite sand from Southport, Australia

"I have sent you by sea mail a sample of beach sand taken from Southport beach, 50 miles south of Brisbane, Australia. This sand is being treated commercially and contains rutile, zircon, ilmenite, garnet, monazite, and cassiterite." —letter dated July 6, 1956, from S. J. Squires, 61 Hawthorne Road, Galloways Hill, Brisbane, Queens, Australia.

From Queensland's southeast corner, Southport beach on the Pacific Ocean, we have a sand sample that is fine grained and dark gray in color. It consists chiefly of black lustrous ilmenite with green epidote, pink garnet, brown monazite, colorless quartz, dark red rutile, colorless zircon that fl. orange, and a tiny amount of black lustrous magnetite.

Beach sand from Baffin Island, Canada

From the southeastern shore of Baffin Island, Franklin District, Canada, we have a sand sample that was sent us by Fred W. Schmeltz, 603 Fairlawn Ave., Warren Point, N. J.

The sample is a medium grained, brown sand. It consists chiefly of chalcedony (red, gray) with smaller amounts of colorless quartz, reddish and colorless

feldspar, with very small amounts of blackish biotite, green epidote, and black magnetite.

"Wth this letter I am mailing you a sample of sand from Baffin Island. This comes from the beach at the northern tip of Frobisher Bay. On the map I am looking at there is a small dot showing a 'town' of Frobisher Bay. My contact there shows that he collected this at the water's edge."—letter dated Oct. 8, 1956, from Mr. Schmeltz.

Beach sand from Santa Marta, Colombia

Santa Marta, the capital of the Department of Magdalena, Colombia, stands at the mouth of the Manzanares River and on the Caribbean Sea. It is a city of about 20,000.

From the city we have a sand sample that was collected for us by W. T. O'Gara 2231 Hurley Ave., Fort Worth 10, Texas, a few months ago when he was stationed in that country. The sample is a dark gray, fine grained sand. It consists of smoky quartz, flesh-colored feldspar, black biotite, whitish muscovite, and a tiny amount of black magnetite.

"Sand sample from Rodadero Beach, Santa Marta, Departamento de Magdalena, Colombia, the oldest city in Colombia, founded by Rodrigo de Bastidas. Collected by W. T. O'Gara, July 20, 1956."—on label.

River sand from Suva, Fiji Islands

Suva, on the southeastern coast of Viti Levu Island, is the capitol of the Fiji Islar ls. From nearby Rewa River, the largest river in Fiji, we have a sand sample that was sent us by Max Haleck, Pago Pago, Tutuila, American Samoa.

The sample is a dark gray, medium grained sand. It consists chiefly of quartz (smoky, also some brown jasper) and epidote (some deep green, gemmy, but much is almost black and opaque). Black magnetite and whitish muscovite also present.

"Rewa River, Suva, Fiji Islands."—on label.

Shell sand from Conception Bay, Mexico

Conception Bay indents the east coast of Baja California, Mexico. From the bay we have a sand sample that was sent us by Paul H. Steele, Box 935, Sacramento, Calif. The sample is a coarse grained, gray sand consisting chiefly of sea shells (white, brownish) and quartz (colorless, brownish) plus a few flakes of dark green mica. Some of the shells fl. yellow under long wave.

"Here is a sample of sand from Lower (Baja) California, Mexico, taken from sea shells collected during the summer of 1954.

"From Conception Bay, Baja California, lat. 27° N., long. 112° W."—on label.

Beach sand from Stewart Island, New Zealand

"Stewart Island, area a little over 600 sq. miles, is south of the South Island, New Zealand, about a two hour ride by boat across Foveaux Strait (considered one of the roughest crossings in the world). It has one town of Oban on Halfmoon Bay, Horseshoe Bay is the next bay over the ridge. The population of Stewart Island is about 300, there are about 12 miles of roads, and only a few small trucks. This is the fartherest south of any inhabited island in the Pacific. It is called the Isle of the Glowing Skies. The colorful Southern Lights are visible about March. In the olden days, Stewart Island was used by the whaling fleets. The foliage looks quite tropical with so many tree ferns, and other smaller ferns. Most of the island is a forest and bird reserve and part of the island is reserved for landless natives. We took several launch trips on Paterson Inlet and stopped at several beaches and at several little islands in the Inlet. The scenery is beautiful, and there are some very interesting trails (tracks through the bush)."—note with sand sample sent us by Miss Winifred H. Arnold, 2020 Magnolia Ave., Long Beach 6, Calif.

The sample sent us comes from Horseshoe Bay which indents the east coast of Stewart Island. It is a fine grained, gray sand consisting chiefly of colorless quartz and lustrous black hornblende with minor amounts of green olivine and black magnetite.

"Horseshoe Bay, Stewart Island, New Zealand, 1951."—on label.

Sea sand from the Dead Sea, Palestine

The Dead Sea, on the southeastern borders of Palestine, forms part of the deepest chasm on the earth's surface and has no outlet. It is about 1292 feet below sea level. The sea is 47 miles long, from 5 to 10 miles wide and about 1300 feet deep.

The Dead Sea is fed mainly by the Jordan from the north and where the river empties into the sea is the small village of Jericho (at the northern tip of the Dead Sea). The water of the Dead Sea contains salt, chloride of magnesium, chloride of calcium, etc. From the chloride of magnesium the water gets its bitter taste and from the chloride of calcium its oily appearance and feeling.

From the shores of Dead Sea we have a sand sample that had been collected for us by Maj. and Mrs. H. P. Graf, formerly of Peekskill, N. Y. (and friends of the Editor of R & M) but when last heard from they were on Formosa.

The sample is a coarse grained, gray sand—all grains greasy-looking as if smeared with oil and this "oil" fl. brown under long wave. The sand consists of quartz (gray chalcedony and dark gray smoky quartz), gray limestone and colorless halite (some of the halite encrusts the sand grains). Small efflorescences of alum on the sand grains are also common. Small rusty magnetic particles seen in the sand are apparently bits of iron and not magnetite. Due to the halite and alum the sand has a salty and bitter taste.

"We obtained the sand from the Dead Sea near Jericho where the river Jordan empties into the sea. It was on the Palestine side. We drove over from the city of Jerusalem."—on label.

River sand from Galston, Scotland

From Burn Anne (River Anne) at Galston, Scotland, we have a sand sample sent us by Sandy Ramsay, 1015 Aikenhead Road, Kings Park, Glasgow S4, Scotland. The sample is a fine grained, dark brown sand. It consists of smoky quartz, pinkish feldspar, blackish magnetite, and brown clay (all grains stained brown by the clay).

"River sand from Burn Anne, Galston, Ayrshire, Scotland. This is from the one time famous agate locality where moss, eyed and jasp agate were found. Little is found there now, though we did pick up a little jasp agate and a few pebbles of carnelian. Agates are still found from time to time in the fields at ploughing times."—on label.

Serpentine sand from Ladybrand, South Africa

Here is an interesting sand that was sent in by Ernest J. Sawyer, 9 Country Club, Wetton Road, Wynberg, C. P. South Africa.

The sand is medium grained and greenish. It consists almost entirely of greenish serpentine which is so soft that it breaks down easily into a greenish, scaly clay. Some dark bronzy phlogopite, a tiny amount of dull black magnetite, and some white sea shells also present (the shells are nicely rounded and water polished).

"Sand from the Agate Reef at Ladybrand, Orange Free State, South Africa. Said to be diamondiferous. Collected by E. J. Sawyer, F.R.S.A., March 1955."—on label.

Shell sand from Charlotte Amalie, Virgin Islands

Mrs. G. D. Wiebe, 310 Beach Ave., Mamaroneck, N. Y., sent us this sand sample. It is a medium grained, gray sand consisting entirely of sea shells (brown, gray, white, pink)—most of them rounded and nicely water polished. Some of the shells fl. yellow under long wave.

The sand comes from St. Thomas, one of the Virgin Islands (U.S. Possession in the West Indies), 43 miles east of Puerto Rico. St. Thomas has an area of 32 sq. miles.

"This sand was brought back by a friend who visited there. She says it came from Morning Star Beach, Charlotte Amalie, St. Thomas Island."—on label

Charlotte Amelie is on the southern coast of St. Thomas Island.

WOMEN'S CORNER OF R&M

Conducted by Winnie Bourne
c/o Rocks and Minerals

Box 29, Peekskill, N. Y.

Dear Winnie:

"Please forgive me for not writing you before this. I think you have done a wonderful thing to start this column for the 'ladies', after all we are good rock hounds too. I first got interested in rock collecting through my nephew, Mr. Copus, who has collected the past 30 yrs. He took my husband, son and me to the Wisconsin Convention about 8 years ago, and that is where the bug really got us. Stones are getting more beautiful to us all the time.

"This summer we went to the Minn. Convention then on thru the west covering ten states collecting gem material and minerals. We are collecting for our old age when we can retire and work with our rocks just as we want to, and travel and collect more. We love those days out in the field collecting. It is hard work but much fun. In my mind it is the next thing to heaven. God's own treasures. I could go on and on and never get it all told, but want to save space for others, so will sign off and say we'll always love rocks."—letter dated Dec. 20, 1956, from Mrs. Loyd Decker, R2, Findlay, Ohio.

P.S. "Last March Mrs. Allen and myself started the Hancock Geological Society and have 24 members, hoping to increase the number by 24 this year."

Note:—Thank you for your interesting letter Mrs. Decker and it's certainly nice hearing from you and may we extend our best wishes to you and Mrs. Allen and to the members of your newly formed society.

Dear Winnie:

"I enjoy your column very much and would like a small part of it for my letter.

"Being just a mere amateur at this rock collecting I do not know very many rocks as yet, but it certainly opens your eyes to the beautiful rocks around us. The other day I was in Victoria, it was raining and blustery and the sidewalks were streaming with water. Now I've walked over those sidewalks for 11 yrs. and failed to notice the beautiful pebbles on those sidewalks.

"There was quartzite, green & red jasper, agates and many other wonderful colored stones. I got soaking wet just standing admiring those lovely stones. People must have thought I was crazy standing there but I was so fascinated.

"I do not know where Victoria got its gravel from, but I am going to find out so I can obtain some of those wonderful pebbles, so you see even on a miserable wet day there is always something beautiful to look at.

"I would like to hear from other rockhounds. I can send them information where to collect minerals in B.C. If anyone comes to Sidney, would be glad to see them. I live over the Sidney Post Office."

Mrs. Doris Horton
Box 219
Sidney, B.C.
Canada.

Dear Winnie:

"I am only 14, but I'm an honest-to goodness rockhound. As a science project this year in school (I'm in 1st year high) I made the family tree of quartz. If you remember it was shown on page 12 of the Jan-Feb. issue last year.

"I included 14 types of quartz plus quite a story on quartz. I told my teacher

of my plan and she thought I should also submit it as as an entry in our annual science fair. Last year at the fair I entered an "All a-round" collection and won honorable mention for it.

"I certainly must thank ROCKS AND MINERALS for the idea and I will let you know how I make out. I was wondering if anybody has thought of a mineral club for this section of the country. If they have, I wish they would let me know."

Miss Nancy Simmons
Box 167
Main St.
Amenia, N. Y.

Note: We offer our congratulations, Nancy, on your wonderful progress as to your hobby and your accomplishments in such. May a prize again come your way in your annual science fair. You would be a valuable member to any mineral club and perhaps you could interest your friends in forming a mineral club

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Dear Winnie:

We're sending you the obituary of our friend, subscriber to R&M and fellow mineral collector, Mrs. Sarah Schoenbart.

We felt your column should not only reflect the gladness but the sadness of our women collectors.

Gerry & Will Shulman
113 Huntington Terr.,
Newark 12, N. J.

Gentle, modest Sarah Schoenbart is not with us anymore. Born in Michigan, she died of Cancer in Monclair, New Jersey, October 3, 1956 at the age of 58. She is survived by her husband Irving and her daughter Jean.

She was a member of the Newark Mineralogical Society for many years and through the kindness of her husband we inherited her notebooks, her library and her fine mineral collection.

It wasn't until we looked through her books, her diaries and her collection that we were able to fully appreciate the intellectual heights and attainments of our gentle friend.

Here was a woman who was not only deeply interested in minerals, but whose intelligent curiosity took her into many other intellectual fields.

Her fine collection although international in scope was mainly Franklin containing many rarities and showed discriminating taste.

Mrs. Schoenbart was a world traveler and a student of European culture. She was greatly interested in mountain climbing, reading extensively in this field, following the latest conquests and keeping detailed notebooks on this activity. Sarah was a student of classical music and had a great appreciation of the arts.

Perhaps her greatest love next to minerals was astronomy. She owned a large reflecting telescope and her notebooks, charts and maps which she kept on the movements of the stars would do credit to a professional scientist.

Sarah was a devoted mother and a loving wife. So self effacing was she that we, her friends, never knew how serious her ailment was until shocked by the news of her premature death.

Sarah has gone to her stars and we, her friends, are happy that she made earth so pleasant a place while she was here.

Dear Winnie:

"A few lines to let you know that I look forward to reading "Women's Corner" very much. I always make a dash for the mail whenever ROCKS AND MINERALS is due, and secretly hoping hubby isn't around, so I can read it first—before he wants his magazine.

"Think it would be a swell idea if the women had a magazine with "Men's Corner" ha, ha, who knows, maybe the time will come???

"Enclosing a poem I made up of our prospecting trip—if you care to publish it sometime. Keep up the good work, Winnie".

Mrs. Elsie Simila
R.R. 1,
Devlin, Ontario, Canada

The Prospecting Trip.

I went prospecting one September day
A good remedy to chase the blues away
We arrived "Johnny on the spot,"
For an early start means a lot.
And time can surely fly
As rocks chips go flying by.

I was busy as a bee
Alas! silence—surrounded me,
I called to hubby, dear
Are you far or near?
Around a curve, he was trying to squirm
On all fours like a worm.

With my pick I landed hard, ouch oh! oh!
A big rock hit the bunion on my toe
And loud words begin to fill the air
Husband said sounds like six languages over there
I speak only two
Enough pranks out of you.

Guess! Mother nature thought it best
To hold the "hidden treasures" to her breast
For a bitter North wind began to blow
And the heavy clouds looked like snow.
I was chilled right throught to the marrow
But thinking of another rock-hunt tomorrow.

(Elsie Simila)

Texas Federation Show

The Texas Federation of Mineral Societies will hold its annual show and convention May 3, 4, and 5, 1957, at the Bexar County Coliseum, San Antonio, Tex. The San Antonio Rock and Lapidary Society is the Host Club.

The show will be held in the exposition building on the Coliseum grounds. Unlimited parking facilities are available and the Coliseum grounds are only a few minutes from downtown San Antonio.

Every effort is being made by the show committee and the host club to make this the most outstanding show ever held in this part of the country. The theme of the show is—"A Rockhounds Show—by Rockhounds—for Rockhounds". Competitive exhibits in all phases of the hobby for members of the Federation will be the largest seen in the southwest. Displays are invited from all individuals and organizations that may care to attend. The non-competitive exhibits will include probably the largest collection of stones cut by amateurs to be seen at any show.

Only a limited amount of dealer spaces are available and those interested should contact Raymond Rock, 322 Arlington, San Antonio, Texas, for information.

Information wanted by Readers

A number of requests have been received for information on how to clean minerals coated with clay. Here is a method from Zodac's "How to collect Minerals." p. 54.

"At one time the author had some tourmaline crystals which were coated with clay. The tourmaline were soaked over night in kerosene oil. This loosened the clay so that it could be scraped off with a knife and at the same time the oil gave the crystals a nice luster."

If readers know of other methods, we would like to hear from them.

I wonder if you could tell me where I can rent or borrow films on any phase of mineral collecting or mining. The Methodist Church in Ellenville has a young couples club and would like to have a program at one of the meetings on the hobby of mineral collecting. Who knows, we might make some converts to the mineral collecting hobby.

George Heusser
4 Spring St.
Ellenville, N. Y.

Ans.—One source is the Bureau of Mines Experiment Station, 4800 Forbes St., Pittsburgh 13, Pa. Does any reader know of another source?

I am a subscriber for R&M & think it's great. I am 11 years old. In school we are studing Okla. history. I picked lead and zinc. I have a lot of duplicates and would like to swap. Could you give me some information on how to start a mineral club?

I am giving a lot of publicity to R&M.

Thomas A. Kelley
528 S. 79 E. Ave.
Tulsa, Okla.

Ans.—Read the reports of various clubs as they appear in each issue of R&M in Club and Society notes. Zodac's, 'How to collect Minerals' devotes a chapter to "Organizing a mineral club.

THE MICRO-MOUNTER

Conducted by Neal Yedlin, 129 Englewood Dr., New Haven, Conn.

In the fall of 1955, accompanied by Dr. George Switzer of the National Museum, and Paul Desautels of Baltimore, we visited Dr. Horace Winchell at Yale and were privileged to see the m/m collection housed there. Some of the things were fine, some fair, and some—marcasite, water solubles, etc.—had completely disintegrated. We subsequently remounted some of the specimens, added 110 new mounts from our own material, and plan to do a major revision. The specimens were from a number of sources. The majority were contributed by Lazard Cahn. We publish part of a letter from him to Yale. It gives some background to the history of m/m collecting as we know it to-day, altho it neglects to mention Rakestraw as one of the founders of the hobby. The letter is dated June 23rd, 1933. Mr. Cahn says: "It is very gratifying to hear that my contribution of micro-specimens has had a favorable reception. Before he left for Europe I wrote to Prof. Ford that I had many duplicate mounts which I would send him if he cared to have them. In compliance with my request Mr. Ingerson sent me a list of the mounts prepared by Mr. Knight and I found, upon examining it, that I could add substantially to the number of species.

"From the early Seventies on, this branch of mineral collecting was actively engaged in by Mr. Geo. W. Fiss of Philadelphia and continued with unabated interest until shortly before his death in 1925. Mr. C. S. Bement's collection of cabinet specimens furnished a source of supply for the micro-mounter. Mr. Fiss was given leave to remove small portions from the specimens when this was feasible without doing much damage. He used the permission given him with discretion but, nevertheless, on an unfortunate occasion, he seriously injured a valuable specimen. He never afterwards resumed operations of this kind although Mr. Bement encouraged and urged him to continue. Fiss mounted for Bement as well as for himself. Their collections were visited and admired by many people. Among their visitors were Penfield, Von Rath, Groth, Goldschmidt, Ungemach, Miers, Geikie and Palache. Bement's activity in micro-collecting increased greatly after the sale of his large collection to J. P. Morgan. He ransacked the stocks of European dealers on various occasions when he was abroad for suitable material. As a result, the Bement-Fiss collections expanded by leaps and bounds. This intensive collecting continued until Bement's eyesight failed. His collection then passed into the hands of Mr. Fiss who then transferred to his own collection all specimens that showed any superiority over those he previously possessed. In almost every case he placed his own inferior specimen in the duplicate collection which was eventually purchased by Mr. A. F. Holden. After his death it was sent to Harvard together with his older minerals. Mr. Fiss was chiefly attracted by the beauty of micro-minerals, and cared little for specimens of scientific merit if they lacked beauty. As he mounted nearly all the minerals in both collections, many specimens of crystallographic interest were excluded from the collections, much to Mr. Bement's regret. Mr. Fiss took great pains with his work; he was very skillful and his mounts are models of neatness. There were very few collectors in his day; today their number has increased but they are not at all numerous."

Some additional notes anent the age of the m/m branch of mineral collecting. Fiss and Rakestraw (See ROCKS AND MINERALS Dec. 1931. Preparation of Micro-mounts) are credited with being the first to systematize the collecting of m/ms, circa 1870. John Albanese, of Union, N. J., sent an older specimen to us. Here's what he had to say about it: "Sent you for examination a tiny cube of lapis. This is from an old collection,

started by Dr. Morton of Germantown, Phila. in 1845. Dr. Morton died around 1895 and the collection rested in an old attic for 50 years before I bought it. Note that collectors in the last century went for m/ms, although this specimen was mounted on a piece of cork. Now don't tell me it is a xl of lazurite. The fellow went through an awful lot of trouble to cut and polish this tiny xl."

Calvin C. Brown, P.O. Box 212, Lynchburg, Va., sent us 2 specimens of amethyst with movable bubbles. These are fascinating. We referred him to our comments on movable bubbles in quartz (*Rocks and Minerals* Vol, 24 No. 1-2 P. 40, Jan-Feb 1949). His observations follow: "Enclosed are 2 pale amethysts which contain bubbles of 2 kinds, "air" and "gas". The air bubbles do not vary in size with normal temperature changes. The gas bubbles come and go as the temperature varies in the 80s, F. If the room temperature is near the critical point the heat from a finger will make the bubble disappear quickly. The openings containing the liquid are usually crystal-shaped, but are too small to be seen properly with the unaided eye." In a later note he says: "Your observations in your article on bubbles in Maine quartz are in line with mine on the Virginia material. However, all the specimens here do not have the same critical temperature. I believe there is much pressure inside the openings and this controls the expansion of the carbon dioxide. However, where there are several inclusions within a single piece they are all remarkably uniform as to critical point . . . . It is interesting to see the bubbles boil or effervesce back into being. The boiling occurs as the temperature is lowered rapidly. Few pieces have openings as much as 1/8 inch in longest dimension and it takes one that size to see the action of boiling."

There has been a great deal of discussion regarding the definition of a m/m. Uniformity, size, required degree of magnification, type of mounting, etc. have all entered into the various definitions submitted. We personally take the view that a general description is preferable to a specific one. It is not confining, and it permits of variations determined by the individual likes, needs, habits and perhaps environment of the collector. There are as many types of m/m collections as there are collectors, and arbitrarily to say that one is right and another is wrong is defeating the purpose. Bear in mind that the box, stand, cement, etc. are all incidental. The important thing is that tiny mineral that is being supported for observation. With this in mind we submit the following: "MICRO-MOUNT — ANY MINERAL SPECIMEN, PERMANENTLY MOUNTED, REQUIRING MAGNIFICATION FOR PROPER OBSERVATION."

Three tips from W. Nelson Whittemore, of Santa Barbara, Calif.

1. A pair of cutting nippers a great help in collecting m/ms.
2. A 3-sided cardboard shield saves a lot of time and eliminates floor hunting.
   (For another trick see *Rocks and Minerals*, May 1948, Page 423.)
3. Double faced scotch tape prevents losing some material which disintegrates when cement is used. (Good for mounting tiny xls, too.)

Thanks, Mr. Whittemore. All suggestions are welcome. Everybody likes new ideas.

5th Annual Gem Show

The fifth Annual Gem Show sponsored by the Washougal Gem Club, in cooperation with Mt. Hood Rock Club, of Gresham, Oregon, Yacolt Mineral Club of Yacolt, Washington, Columbia Gorge Rock Hounds of Corbutt, Oregon and Southern Washington Mineralogical Society of Longview, Washington, will be held at the Crown Zellerbach Hotel in Camas, Washington, on May 18th and May 19th, 1957. From 10:00 a.m. to 10:00 p.m. on Saturday and from 10:00 a.m. to 6:00 p.m. on Sunday.

Door Prizes.

Nick O. Farnstrom
Corresponding Secretary
Washougal Gem Club

FOSSIL DEPARTMENT

1340 Crandall Avenue
Salt Lake City 6, Utah
Conducted by Howard V. Hamilton

FOSSIL HUNTING IN GREENE COUNTY, N. Y.

East Durham, N. Y.

While the readers of R & M magazine are interested primarily in minerals, still there are many among you who are interested in fossil collecting too. My lifetime has been spent in Greene County, State of New York and because this region is not too blessed with minerals, it is only natural that I have turned to fossil hunting for my rockhound activities.

The Austin's Glen region along the Catskill Creek a few miles westerly of the village of Catskill, has long been the mecca of geologists. Here within a few miles one will find as strange and as fantastic a blend of formations as is to be found anywhere. Folds and dips and strikes, layered rocks tilted up-stream and just beyond, similar formations tilted down stream, are the general run of things.

Mostly of limestone, capped with what is generally called Catskill shaly limestone, it is highly fossiliferous. It is a paradise for the camera "bug" too. Here in my native Town of Durham one does not find too much crustacean fossils. It is Devonian rocks and it is chiefly plant and tree material that one encounters. But some of this is fine. In the black Hamilton shales, as exposed in a few places, a wide variety of fossils are found.

To the student of rock formations and geologic periods of time, high on the slopes of the Catskills in one locality you may find fossil remains of tropical trees. Right next to these you will note the deep grooves and scratches of passing glaciers and just beyond are the ripple marks denoting the shore line of ancient seas. Yes, it is fascinating, and incredible.

If you are planning on collecting in Greene County next summer, why not stop in at the Durham Center Museum on Route 145, twenty miles west of Catskill, and see some of the material you may encounter? Museum is open Sunday's only, admission is free, and picnic facilities available. Season July-August only.

"Here is an item I found in our Michigan conservation paper which I thought was very funny. I hope you will appreciate the humor,"—letter dated Dec. 13, 1956 from Mrs. Arlene M. Handy, 4391 Comfort Rd., Tecumseh, Mich.

Here is the item:

NOW WHITE MAN

TAKE EVERYTHING

The Indian's philosophy of the white man's exploitation of natural resources was summarized neatly the other day by Steve Buzwah, chief of the Indians from the Sagamuk Reserve near Sault Ste. Marie.

Asked how the uranium boom was affecting the Indians, Chief Buzwah replied, according to the Sault Daily Star:

"Indian never get anything from white man. Two or three hundred years ago white man come to North Shore of Lake Superior. He take all the fur and give Indian a few strings of beads. Then, a few years later, he cut down all big trees; build mills at Cutler, Spragge, Spanish and Blind River. Soon all big trees gone—he burn down mills and go away. Few years later he come back, build paper mill at Espanola, cut down all small trees. Nothing left on North Shore but rock. Now, by gosh, he come back for rock."

THE AMATEUR LAPIDARY

Conducted by Captain George W. Owens

Hq Sq 384th Bombardment Wing, Little Rock Air Force Base, Jacksonville, Arkansas

Amateur and professional lapidaries are cordially invited to submit contributions and so make this department of interest to all

GEMS

Many thousands of words have been written about the subject of gem stones. Gems were known to the ancients and to the man of medieval days. Gems have played their part in history, have affected the course of nations, and have brought joy as well as sorrow to man. Ah man, the egotist, who bends the very atom to his will, but so little understands the basic secrets of nature.

As has often been said, a Gem must possess beauty, rarity, and durability.

Any mineral may be classified as a gem if it meets these basic requirements. But even the best known of gem minerals, such as the diamond, are not always gems. This is a fact that gives us diamond bort— which may be purchased for a few dollars a carat while a gem diamond will run into as many hundreds of dollars for the same amount of weight. Gem minerals of an insufficiently high grade to be used for gems do, however, often yield us some of our outstanding mineral specimens. Then, too, many gems are not from the true mineral family. Notably amber, pearl, and coral. These, too must "measure up" to the rigid standard of beauty, rarity and durability. And before anyone can say that these do not meet the durability standard, let the author state that he has in his collection a pair of coral and pearl earrings that are over five hundred years old. But let us take the qualifications one by one and see at what point we arrive.

First, Beauty.

A diamond. to possess beauty should be relatively free from unsightly flaws, not clouded, and have the characteristic play of colors known as its "fire". It may be of any color as long as it is transparent. These same statements, in general, apply to all colored stones—"colored stones" being considered as all other gems. Naturally, some are not transparent but are valued for other considerations, such as color or surface luster. So thus we have attempted to describe the beauty part of a gem stone, so now let us go to Rarity.

Rarity establishes a value and may have a greater affect on this value than either durability or beauty. A mineral such as beryl may be quite common. However, gem quality may be exceedingly rare. Everyone has seen pictures of beryl crystals that were actually many feet long and weighed hundreds of pounds, yet a flawless emerald of the best color will command several hundreds of dollars for a single carat.

Durability is essential to classify our mineral into the family of gems. A drop of oil spreading across a pond of water has beauty but lacks each of the other two requisites. Durability to a great extent depends on the hardness of our mineral and also on its toughness. Jade is conceded to be in the neighborhood of six in hardness yet it is extremely tough. Thus it has a durability far exceeding the usual run of six hardness minerals.

Beauty is of more importance than durability. Opal is a fine example of this fact. The average opal is only five in hardness yet it finds a ready sale in all our jewelry stores and is even the birthstone for the month of October.

But you will note by glancing at any table of hardness that the gem minerals are largely at the hardest side of the table. Durability backs up the beauty of the gem, giving it a lasting nature.

Such things as fashion or vogue often influence the demand for certain gems and

sometimes even create an artificial price level. A good example of this was the heavy demand for jet that occurred around the turn of the century. One would have a hard time today locating such a stone in our average jewelry store.

In addition to our basic three requirements it is generally accepted that the stone should be fashioned in some manner. Tumbled, cut and polished, carved, or drilled in such a mode as to enhance its basic appearance. In a faceted stone, one cut with many flat plain surfaces, quality cutting and polishing are mandatory, so much so, in fact, that even your amateur lapidist must have a knowledge of the physical properties of the mineral with which he is dealing.

So this then brings us to the classification, or correct nomenclature, as would be said by a military-minded person.

A classification of gem minerals and their substitutes is not the same as a classification of just plain everyday minerals. Oh, no! A long time ago someone "changed" the system. Minerals are banded or grouped into families by either crystal family, or more commonly by their chemical composition, but not gems. No, sir. In dealing with gems you will soon discover that one mineral, abet with very minor changes in its chemical properties, will and does supply us with as many, or more than, four distinct, different gems. Once again, the mineral beryl is a good example of this complicated business of naming gems for the momentary famous, the stars, the moon, the sun, and just about anything alse you care to consider.

Just off hand, I can recall the following names: Emerald, Aquamarine, Goshenite, Green beryl, Morganite, Yellow beryl, Heliodor, and Golden beryl. Not complaining, you understand, just pointing out what a complicated business the classification of gems really is. For instance, if one were to group gems by a mineralogical grouping, it would look something like this:

Element: Diamond

Oxides and Hydroxides: Corundum, Hematite, Opal, Quartz

Carbonates: Azurite, Malachite

Aluminates: Chrysoberyl, Spinel

Phosphates: Apatite, Lazulite, Turquoise

Silicates and Titanites: Beryl, Garnet Jade, Tourmaline, Zircon.

But who in the world would go into a jewelry store seeking a turquoise and ask for a phosphate? Even the jeweler would direct you across the street, or next door to the drug store. So we see that this classification business must be broken down still further if it is to make any sense at all. Therefore, let us say that we can describe a gem by its luster or color, so we have arrived at descriptive classification. This classification mainly concerns a gem's value and can not be used as a means of identifying the mineral family of the gem. Now under this heading we will find stones separated according to Dr. Whoosis' idea of either precious or semi-precious. Or if your refrence is a different one, it may be Dr. Whatis or Professor Doubtess. Depending on the book you choose, you will find these "impartial" lists accordingly arranged to suit the author's taste. (At least I can not determine any other reason for some of the lists I have seen.) But let us be kind and call it a difference of opinion between authorities and let us each make our own list. Since we are not jewelers and do not depend on the sale of diamonds for a living, some authorities would probably be shocked at where the "slot" for the diamond comes out on my list—but then I prefer the colored stones. However, a point to not overlook in your list is the sad but true fact that *all* gems are rare. Such a term as semi-precious should probably be thrown right out of the window and just one long list of gems be made. According to availability of suitable cutting rough in all of our gem materials, all are classified as precious in my list. Even quartz crystals. Now before somebody starts laughing at this last statement about quartz, have you ever seen a natural BLUE, not amethyst, transparent quartz XL? The author has just received three small ones as a gift from a gentle-

man who has been in the collecting game for over forty years. So it is possible to make a list and do without the term semi-precious. Many opals and many jades as well as some of the rare colors of spinel are much more beautiful and definitely more rare than the average diamond. Even a beautiful flawless amethyst has more value than an off-color dull brown cloudy piece of corundum. The individual stone itself should set its own value rather than just being classed as to type. For instance a clear transparent amethyst of pale color is not to be valued as highly as one of good medium color because good clear transparent pale amethyst can be obtained on today's market at a fraction of the cost of the deeper tones of amethyst. Yet, so history tells us, amethyst once rivaled diamonds for cost in jewelry stores. So times and supply as well as demand all have a part to play in the value of gems. It is much better to classify your gems as gems of fine quality or poor quality, than it is to say one is expensive while the other is cheap. Since most of you who read this are amateurs and not concerned with making a living from the sale of gems, let us be frank and say that often the corner jewelry store manager can be as easily confused as the average Mr. John Q. Public. Why? In most cases your Mr. Jewelryman is a shopowner selling a commodity retail that he has purchased wholesale and aside from a few pertinent facts, knows actually little or nothing about gems. Quite a few could not tell a green garnet from a peridot. How many times after the advent of the synthetic stone titania did Mr. Jewelryman get taken in? Times without number. In fact for a time it was almost impossible to sell Mr. Jewelryman anything that even looked like a diamond. But we amateurs are not faced with that problem. What we need is a quick reference work of the major classifications of gems and a few tables telling us their hardness, cutting and polishing techniques or to be specific, an Amateur's Handbook of Gems. There are a few really good books on the subject, lots of mediocre ones, several downright poor ones, but none of them are all inclusive. One of the very best on today's market is the book "Gem Cutting" by Captain John Sinkankas, but even it fails to go as deeply into the subject of gems as some would like. We amateurs often get ourselves backed into a corner on some type of a cut or with some mineral we are trying to polish. An all-encompassing book would be a mighty fine thing to have at a time like that (especially if it listed every mineral), but such a book would probably be as large as the side of a house and then would not have the one item of information we wanted. So without further ado and without reference to money values let us explore some of the odd names used in the jewelry business to denote such things as you and I know as garnet, jade, topaz, etc.

Many gems have names that go back to most ancient history. In fact it is doubtful if the man who gave ruby its name knew or cared that it was the same mineral as sapphire. Nearly all yellow stones were once upon a time known as topaz. Now in this enlightened age we know that yellow quartz or citrine is not the same as the mineral topaz. So to call a citrine a topaz is either an attempt to foster something off on someone or it shows our lack of knowledge. A citrine is a beautiful stone in its own right and needs no boost. Even good yellow sapphire has sometimes been termed an oriental topaz. Why, is not understood. A prime yellow sapphire is a delight to the eye and like citrine certainly needs no help from the name topaz. In fact, the name oriental, is often applied to gems, such as oriental topaz, oriental amethyst, oriental emerald. In most cases the gem described is a sapphire but it may be any a number of things down to an outright synthetic. One book in the author's collection refers to green tourmaline as "Brazilian emerald". Yet another uses the term "Transvaal jade" for a massive green garnet found in Africa. The author has also seen this garnet offered for sale as African jade, oriental jade, and as just plain jade. So jewelry store names are sometimes hard to understand. Some,

while quaint, are misleading, others fairly well describe the particular object but how many of us are interested in applying names that actually mean nothing? Probably one of the best methods is to turn to the natural occurrence of gems and use the family name with a brief description such as red sapphire, white sapphire, blue sapphire, etc. Now gemologists will break down the gem minerals into crystal families or systems. There are six great crystal systems. These are outlined in relation to their crystallographic axes. They are:

1. Cubic
2. Tetragonal
3. Hexagonal, including Rhombohedral
4. Orthorhombic
5. Monoclinic
6. Triclinic

All of the crystal gems will belong to one of these families. In addition all, or nearly all, will have imperfections and impurities in the form of inclusions and some amount of color. In some the color is a natural part or result of the chemical formula for that stone, in others its presence denotes an impurity in the basic chemical. These can be observed under magnification and often without resorting to the use of any type of magnifier. In addition to the presence of impurities in the form of other minerals, liquid inclusions are sometimes present. We have all seen water or oil included in quartz crystals. All these inclusions affect the value of gems in some regard.

So one may readily ascertain that this hobby of ours is one that has many more facets than are readily visible. No wonder so many fine people have become intrigued by the boundless aspects open to them in this most interesting and satisfying way of communing with nature and one's God.

Send it to a Lapidary!

Perhaps the followings is not poetry but it is "minerals" and who could ask for anything more?

When you're walking through field or wood
And you find something you think is good.
A million years, or even more,
By human eyes unseen before.
Ruby, red or sapphire rare,
Lucky you, to find it there!
Although it's only quartz or limestone,
Don't use emery for a grindstone.
Wrap it safely - solitary.
Send it to a lapidary.

(By R. Clyde Brown
Fieldale, Va.)

Sterling C. Gillette, Sr.
(Obituary notice)

The following letter, dated Dec. 20, 1956, comes from John H. Henry, Rt. 1, Box 127-B, East Hampton, Conn.:

Enclosed is a clipping from the *Middletown, Conn., Press,* announcing the death of your old friend, Sterling Gillette, Sr.

A grand old man, he certainly held you in high esteem as he mentioned your name many times during his last year of illness.

He put up with many abuses from a handful of rascals, a thing his family refuse to do as they have posted the property and trespassers will be prosecuted.

It might be well if you gave notice of this in R&M as it may save much disappointment to many people who go there almost daily.

Mrs. William Smith, the owner, is willing to lease the quarry to responsible parties.

(This letter was sent to the Editor of R&M, personally, and the quarry mentioned is the famous Gillette quarry at Haddam Neck, Conn.).

Below is the clipping dated April 25, 1956.

Sterling C. Gillette, Sr.

Sterling C. Gillette, Sr., of Haddam Neck died this morning at the Middlesex Memorial hospital.

A lifelong resident of Haddam Neck, Mr. Gillette leaves one son, Sterling C. Gillette, Jr., of Haddam Neck; two daughters, Mrs. William Smith of Haddam Neck and Mrs. George Hindle of Brooklyn, N. Y., and 12 grandchildren. He was a member of Haddam Neck Grange.

THE GEM COLLECTOR

Conducted by Bill Cole
408 Dickinson, Chillicothe, Mo.

TOURMALINE

Many writers have referred to Tourmaline as the rainbow gem, and what better name could be bestowed on this gem which occurs in such a variety of colors that it is rivaled only by a rainbow, for the Tourmaline occurs in a wider range of color than any other gem or mineral.

The name Tourmaline is derived from the old Sinhalese word Turmali, however, not too much is known about the history of the gem as it was not referred to by this name until the Eighteenth century and before that it was probably mistaken for Topaz and Zircon which certain hues of Tourmaline resemble closely. The Tourmaline is a relative newcomer to our world of gems, though it has undoubtedly been used for centuries as a gem. It was only recognized as a distinct gem species early in the Eighteenth century when a parcel of the rough stones were brought to Holland from Ceylon, and then the only reason they were recognized as a new gem was by the unusual electrical property it has when heated—that is, it becomes charged and will pick up small bits of paper and cloth. The stones in the particular parcel from Ceylon had been laying in the sun and thus became heated and charged, it was then noticed that the stones drew small bits of ashes and paper to them, and so an investigation was begun to determine more of the strange properties of this new gem.

The physical properties of Tourmaline are quite fascinating to anyone interested in the unusual, and what real rockhound isn't? These physical aspects are as follows: hardness 7 to 7½ color from clear water white (Achroite) to opaque black (Schorl) with every color of the Spectrum in between, Specific Gravity is 3.06 and the Refractive index from 1.622 to 1.640 which means that a cut stone has reasonable good fire although the gem is more popular because of its colors than sparkle. Tourmaline is strongly Dichroic and this adds another factor to Tourmaline's usefulness as a gem, for the color can be lightened or darkened simply by altering the angle of the table of the gem with the optical axis of the crystal—this is really a blessing with pale colored material.

A peculiar property known only to the Tourmaline is the fact that a single crystal may have several colors present in layers or bands and the boundaries between these colors may be so sharp that they appear to have been stained artificially. The color bands may run up and down the crystal parallel to the base or they may run from the inside out, as in the case of Watermelon Tourmaline where the core is red surrounded by a white zone and green on the outside like a slice of ripe watermelon.

The many beautiful colors of Tourmaline are due to minute quantities of various metallic salts. The chemical composition of pure colorless Tourmaline is Sodium-Aluminum borosilicate and when Lithium is present in small amounts the color is pink or as it is better known, Rubellite, the brown shade is caused by Magnesium being present, when Iron is the metal present we get the black variety which is the most common in the pegmatites throughout the country.

In most cases the color of the stone is where the name is derived, for instance, Rubellite, or Indigolite (blue). The most popular color for modern jewelry seems to be Rubellite, or the light shade of pink. The rarist form of Tourmaline is the colorless variety Achroite, and is usually seen only in museum collections. After the Rubellite in popularity might come the green shade, one particular hue approach-

ing that of the Emerald. The green stones are usually more free of flaws than the Rubellite, but the color is not always so desirable, for the green grades off through olive green to brown and pure green or pure brown stones are comparatively rare. The brown is a very rare color in any gemstone and except for a few varieties of Topaz, is unique to Tourmaline.

The principal world localities for gem quality Tourmaline are Brazil, in the State of Minas Geraes, which is noted for the large and beautiful red and green stones found in the pegmatite dikes there; South Africa yields many fine gem quality crystals and one in particular, a beautiful blue green, is quite popular.

In the United States there are two localities that are of particular interest to the gem collectors today, they are Paris, Maine, on the east coast, and Mesa Grande, in San Diego, California, on the west coast. The large crystals found at the Maine locality are better represented in the older collections of the country as the locality is almost worked out however, in its day yielded some of the finest Tourmaline specimens the world has ever seen. The San Diego locality enjoys the most popularity today since the mines have been worked more recently than those in Maine. The San Diego locality is best known for the large number of fine Rubellites and red-green, bi-color crystals found there, also the crystals found associated with quartz crystals and intergrown with each other are really museum specimens and are in great demand by all advanced collectors of mineral specimens.

Well, a whole gem collection could be made from just the many different colors of the Tourmaline. A few good examples of the rough crystals and cut gems will brighten up any collection and add color that no other mineral can. If you do not already have a good example of Tourmaline represented in your gem collection write your favorite dealer today and see what he can supply you with.

Gorgosaurus–top new exhbit at Chicago Museum

"The Year of the Dinosaurs" is the way 1956 will be remembered at Chicago Natural History Museum, said Dr. Clifford C. Gregg, director, recently in his annual review of the institution's activities.

Dr. Gregg was referring particularly to Gorgosaurus, top new exhibit of the year at the museum. This extremely large and rare dinosaur who lived in Alberta, Canada, some 75-million years ago, is only a skeleton of himself today, but towering 15 feet above the museum floor and extending 26 feet from the nose to tail-tip, he is the tallest, most unusual and most impressive skeleton ever to be brought to Chicago. In all the world there are only seven known specimens. The skeleton is a gift from the museum's board of trustees, the members of which contributed thousands of dollars to a special fund for the acquisition.

"Gorgosaurus qualifies for the title of animal of the year against all other contenders, living or dead," Dr. Gregg asserted.

The articulation or assemblage of all the thousands of bones and bone fragments, performed with meticulous attention to scientific accuracy, occupied Chief Preparator Orville L. Gilpin and several assistants for 18 months, and was completed in March when Gorgosaurus took the spotlight as star public attraction in the museum. In life the animal is believed to have weighed several tons. The fossil skull alone is 42 inches long and weighs more than 200 pounds. A carnivore, Gorgosaurus was the terror of his day, preying upon the more placid vegetarian species of dinosaurs that were his contemporaries. In the museum exhibit he is shown standing over one of these victims, the Lambeosaurus, which was collected by an expedition sponsored by the late Marshall Field III, who was first vice president of the museum and had been a trustee from 1914 until his death on Nov. 8, 1956.

Expeditions in the field during 1956, as listed by Dr. Gregg, included the Archaeological Expedition to Peru conducted by Dr. Donald Collier, curator of South American archaeology and ethnology; the 22nd Archaeological Expedition to the Southwest, led by Dr. Paul S. Martin, chief curator of anthropology; the Zoological Expedition to Borneo, led by Dr. Robert F. Inger, curator of amphibians and reptiles; and collecting of specimens and investigations of anthropological, botanical, geological and zoological problems by staff members and others in the Philippines, Bahamas, El Salvador, Guatemala, Mexico, Wyoming, Louisiana bayous, and other areas.

Club and Society Notes

Attention Secretaries—Please submit neat copies. Give dates and places of meetings. Check names for correct spelling.

New York Mineralogical Club, Inc.

The zeolites of New Jersey held the center of the stage at spirited round table session held at Columbia University on November 21, 1956. Joe Stromwasser led off on where and how to find the minerals in the trap rock areas of New Jersey, Virginia, Massachusetts, and Connecticut. His general advice was to look in the mineralized area of the quarry where the trap rock is decomposing. Dr. Fred Pough followed on the secondary nature of the minerals and how they are formed. Curt Segeler talked on stilbite, epidesmine and epistilbite infusing his recent experimenting into the discussion. Neal Yedlin finished off with the fascinating topic of crystal cavities illustrated profusely with casts after anhydrite and glauberite. There was a lively give and take between the panel and the members and some of the specimens that came out of hiding to decorate the front table were really something.

The following new members were elected: Martin Azarian, Walter Cooper, Mrs. Joy Cousminer, Phyllis Jaffe, and Charles Wilkins.

William C. Casperson, formerly curator of the Paterson Museum, is now living at R.D. #2, Sebastian, Florida. And Tommy Lisle has retired from business, recovered from a serious operation and now lives at Ha-ci-en-da Trailer Park, 5232 East Lancaster, Fort Worth 3, Texas. Tommy is busy cutting the unusual agates he was lucky to get from the Prospect Park quarry in Paterson, N. J.

Joe Rothstein reported on the club field trip to Fonda, N. Y., and a field trip was planned for Bedford, N. Y., for Dec. 9.

Curt Segeler mentioned the wide spread publicity the N. Y. Mineralogical Club Kunz prize has received and urged members to participate.

Dr. Pough reported on a new book on diamonds by Emily Hahn.

The club has made its services available to the N. Y. State Museum.

The club voted to adopt the pin designed by Joe Stromwasser as its insignia and silver and gold emblems will be ordered.

The Dec. 19th meeting was called to order at 8 p.m. in Philosophy Hall, Columbia University, New York City, by President Curt Segeler.

Mr. William Pfeifer presented the names of Leon M. Rosenthal, Madeleine Cotette, Joan Ross, and Thomas Ronan for membership and they were duly elected.

Joe Rothstein reported on the field trip to Bedford which was attended only by Einar Whalen and himself, both being too rugged or too dumb to recognize a snowstorm. Another trip is planned for the future as the old dumps are still being turned over.

The rules of the Kunz prize were discussed. It was stressed that the membership requirement could be arranged after the contest was won rather than it being an entry requirement. The 50-mile radius around New York was also deemed to have a certain amount of elasticity in it to a reasonable degree so that minerals of interest further than this limit could be the subject.

Dr. Ralph Holmes sent in a letter describing his mission as the geologist team leader on a U.N. mission to Iran. His address is Dr. Ralph Holmes, American Embassy, APO 205, C/O Postmaster, N. Y. Postage is 6 cents domestic air for those who want to write Dr. Holmes while he is on his sabbatical vacation from Columbia University.

Curt Segeler again went into ways and means to make an education program for new members effective.

Dr. John Broughton, the New York state geologist, talked on the industrial minerals of N. Y. State. He briefly sketched the main geological features in the state and reviewed the history of the mining industry in the state. The principle metallic localities were described as Adirondack magnetite; ilmenite-magnetite from Tahawus, N. Y., and zinc-lead locality at Balmat. The non-metallic localities were the Portland Cement sites throughout the state; the gypsum and salt sites in central and western New York and the talc that occurs in the Adirondacks. The principal source of fuels (gas and oil) are in western New York. Wollastonite, Anorthasite, and Pyrites are three minerals that show possibilities of commercial exploitation as well as a recent find of carnotite.

Mr. Kurt Servos, the new curator of the state museum at Albany, also attended the meeting. He is interested in bringing out a new listing of N. Y. State minerals and localities and welcomes mineralogists to stop by when in Albany or to write to him giving mineral and description of locality.

Joe Rothstein, Sec.
255 W. 84th St.
New York 24, N. Y.
TR 4-6338

MINERAL SECTION

Rochester Academy of Science

In Rochester, New York, the mineral section of the Rochester Academy of Science meets on the first Thursday of each month, October through May, at the Rochester Museum of Arts and Sciences, 657 East Ave., at 8:00 p.m.

Each program follows a pattern. A quiz sheet on minerals is picked up at the door. There is a brief talk on a study topic by a member. This year it is common minerals. We have a drawing of members' names for a door prize (a specimen representing the study topic). A short business meeting.

The main talk of the evening. In October it was "Genesee Valley Country" by Dr. Robert Sutton of the University of Rochester geology department. In November Dr. Henry Staehle, president of the Rochester Academy of Science, described his trip to the Ouray, Colorado, site of the Camp Bird Mine. For December the topic was "The faceting of gem stones" by Mr. Laurence Copeland of R.I.T. School of American Craftsman.

Coffee, milk and cookies.

In the summer past, there was a variety of field trips. Jaycox Run, near Geneseo for fossils; limestone quarry near Dundas, Ontario; a week-end trip to the asbestos mines of the Ruberoid Co. of Eden Mills, Vt.; the wollastonite mine and mill of the Cabot Co., Willsboro, N. Y.

Submitted by Eleanor Fairbanks,
Secretary of Mineral Section.

Capital District Rock & Mineral Club (Albany, N. Y.)

Mr. Kurt Servos, recently appointed Senior Curator of Geology at the New York State Museum, Albany, N. Y., was very much surprised to learn that the Capital District could not boast a mineralogy club. Having been approached by several people on this subject, he got in touch with Peter Zodac, Editor of ROCKS AND MINERALS Magazine. Mr. Zodac courteously supplied the names and addresses of a number of interested persons in the area, and Leo Vermann, of Coxsackie, N. Y., also forwarded communications received by him concerning the possibility of forming a Rock & Mineral Club, the latter as a result of his recent appearance on TV, and resultant write-up in the ALBANY TIMES-UNION by Mona Smith.

So, after an orgy of letter writing and telephoning, the first meeting of the Capital District Rock & Mineral Club, in embryo, was held on Thursday night, December 13, 1956 in the Mineral Room on the 5th floor of the State Education Building in Albany, with 43 prospective members present. This informal gathering proceeded to elect the following officers pro-tem:—Chairman, Mr. Kurt Servos, Albany; Vice Chairman, Mr. Leo Vermann, Coxsackie; Secretary, Mrs. Jean Carr, Round Lake. A committee was also elected for the purpose of drafting a constitution and by-laws for submission to the club at some future meeting. This committee consisted of, Mr. Warren Kunsman, McKnownville; Mr. Elmer Rowley, Glens Falls; Dr. A. W. Pohl, Albany, with Mr. Servos as Chairman.

The prospective members included, as is usual with any hobby, men and women from many trades and professions, college and high school students, even housewives; novices, amateurs, and advanced collectors. Mr. Rowley suggested a program for future meetings and seasonal field trips that would appeal to members in varying stages of collecting and identifying rocks and minerals. Both he and Mr. Servos mentioned a number of books and magazines that club members might find useful for their research and study. Following adjournment of the business session several mineral collections were displayed; individual treasures popped out of pockets, bags and boxes by the score, and both Mr. Rowley and Mr. Servos literally had their hands full of specimens to be identified.

Future meetings are to be held at 7:30 p.m. on the first Thursday of each month at the place mentioned above. In case of a severe storm, or bad weather, the second Thursday will be the alternate date. Visitors and would-be members are cordially invited to attend.

Mrs. Jean Carr
Sec'y. Pro-Tem
Box 83,
Round Lake, N. Y.

Niagara Rocks & Minerals, Niagara Falls, N.Y.

Niagara Rocks & Minerals held its first winter meeting at the Central YMCA, 43 attended our first meeting.

Dr. Hingartner, our president, announced the exhibition sale and trade night to be held November 8, 1956. He asked everyone to bring any specimens they had for exhibition or sale, after which a movie on the Grand Canyon was shown which was enjoyed by all.

After the film was shown, Mr. Keith Rushton, program chairman, introduced our guest speaker, Miss Eleanor Kirwin, who gave an excellent talk on the "Geology of the Niagara Gorge and Vicinity."

We all obtained a vast store of knowledge and for even those who had a previous enlightment on the subject, we are sure they added to their educational aspect or outlook on the geology of the area.

Mary Fenner
Secretary
606 Fourth St.
Niagara Falls, N. Y.

Rockland County Mineral & Gem Society, N.Y.

Elected to office of the Rockland County Mineral and Gem Society for 1957 were the following:

For President, Mr. John Weitmann, 29 S. Servan Ave., Pearl River, N. Y.; Vice-President, Mr. Edward Howard, 79 Grant St., Ramsey, N. J.; Secretary, Mrs. Marguerite R. Collyer, Green Road, West Nyack, N. Y.; Treasurer, Mrs. Agnes Pugsley, Lindberg Lane, New City, N. Y. Director for three years, Mr. William Rode, Little Tor Road, New City, N. Y.

Marguerite R. Collyer,
Secretary.

The Connecticut Valley Mineral Club

The Museum of Natural History, Springfield, and the Connecticut Valley Mineral Club are sponsoring a series of ten lectures entitled "The Occurrence and Natural History of Mineral Deposits," by Dr. B. M. Shaub, Associate Professor of Geology, Smith College. The lectures will include geological and mineralogical descriptions of various types of mineral deposits with emphasis on those in Eastern United States and Canada.

At the November meeting of the club, a specimen of high grade molybdenite from John L. Merrell of Swastika, Ontario, was awarded to Henry Kowiek of Thompsonville, Conn., as the newest member of the club. The president introduced Dr. Janet Aitken of the University of Connecticut whose topic was the geology of the Highland Border Country of Scotland. Because of its similarity to the local geology of the Connecticut Valley, Dr. Aitken called her visit to Scotland a busman's holiday. Both areas have lava masses which split sedimentary rocks, crystalline gneisses and schists with granitic intrusions, sandstone and limestone. Dr. Aitken included slides of Stafford Island where lava cooled, leaving a most spectacular stone woodpile. Peat bogs three to seven feet thick are cut for fuel, the water being used in processing tweeds and in making beverages. Dr. Aitken ended her talk with a few slides of the Tobermory Highland games such as tossing telephone poles end over end, and hurling boulders with rings in them.

At the December meeting of the club at Amherst College, Dr. George W. Bain, head of the Department of Geology, revealed the secret of Jason's Golden Fleece, a sheepskin used in panning, or sluicing gold. Besides gold to be found in sands, Dr. Bain mentioned tin, diamonds, monazite, pyrite, ilmenite, rutile, garnet, staurolite, tourmaline, magnetite, platinum and zircon. In rivers, the heavy minerals are found at the bottom of the alluvial deposit; on beaches, at the top. This is true throughout the world. In rivers, minerals will usually be found near their source, not more concentrated than the original vein, but more easily recoverable. Dr. Bain referred to "Mineral Resources of the U.S.," Volume of 1905 as source material for 3000 localities for sands with percentages of concentration.

The meeting adjourned to the laboratory to watch a superpanner which duplicates the action of waves on beach sand, showing the heavy minerals deposited at the top of the beach. Dr. Bain also demonstrated an isodynamic separator for separating minerals according to their magnetic reaction, by subjecting them to a magnetic force.

Mrs. Lawrence W. Schoppee,
Secretary
9 Greenbrier Street
Springfield 8, Mass.

The Bellows Falls Rock and Mineral Club

On the evening of November 30, 1956 at 8:00 P.M., the Bellows Falls Rock and Mineral Club met at the home of Mr. and Mrs. Fred Nies, Jr. of Bellows Falls, Vermont.

After our business meeting conducted by our president, Mr. V. Robert Call, the program was turned over to our host, Mr. Fred Nies, Jr. He produced a table with 55 mineral pieces numbered, among them upon the table were many cut slabs, which made it more difficult to identify. Each member examined these minerals, then wrote the name and number of each mineral that was on the table. Papers were then exchanged. Mr. Nies read a list of the correct names of each mineral and the correct ones were checked off. The four lowest scores were called out, and each one was presented with a mineral prize from Mr. Nies' collection. We had all assumed the high scores would be the winners, and so those with the low scores were thereby encouraged to study for another time when the scoring may be different. All other contestants were presented a piece of meerschaum by Mr. Nies.

Our members brought in a few minerals they had found in and near this area to be sent as a club project to a mineral collector in Ohio, to swap for minerals.

Mr. Call suggested the members each choose a subject pertaining to minerals, study all that is possible within the time given to do so, and that one subject be presented at each of our meetings. It was voted to carry out this suggestion, so Mr. Fred Nies will take on Crystals at our next meeting, December 28th, which will be at the home of Mrs. M. E. Jones, Bellows Falls, Vt.

We were very happy to have another new member join our club at our November meeting, our new member is Mrs. Frank Pier, of Brattleboro, Vt.

Delicious refreshments were served to the members by our hostess, Mrs. Fred Nies, Jr., assisted by Mrs. Grace Fairbrother.

Ethel J. Call, Sec'y.,
Bellows Falls R&M Club
15 Atkinson Street
Bellows Falls, Vermont.

Mid-West

Cincinnati Mineral Society

Officers of the Cincinnati Mineral Society for 1957 are as follows:

President, Mr. Fred Keitel, Route #4, Harrison, Ohio.

Vice President, Mr. John W. Ingle, 225 Lafayette Circle, Cincinnati 20, Ohio.

Treasurer, Mrs. John W. Pagnucco, 130 Vermont Ave., Wyoming 15, Ohio.

Secretary, Miss Persis Long, 1283 Michigan Ave., Cincinnati 8, Ohio.

Corresponding Secretary, Mr. John W. Pagnucco, 130 Vermont Ave., Wyoming 15, Ohio.

Rib Mountain Gem & Mineral Society

There has been a new society organized for the mid-Wisconsin area. It meets the first Thursday of the month in the Marathon County Historical Society building, Wausau, Wisc., at 7:30 p.m. Visitors are always welcome.

While this area is not very productive for field trips, the members do come from 50 miles distant to attend the meetings. Our president is Bill Johnson of Wausau; vice-president, Bennett Luedtke of Rothschild; secretary, Mrs. Althea F. Keys, Merrill; treasurer, Mrs. Therese Conrad, Wausau.

Bill Johnson is the son of one of the original founders of the famous "Ruby Red Granite," and always enjoys having both local and traveling rockhounds drop in. The Keys (who have a small rockshop on Hy 51) always have the coffee pot on for their fellow hobbyists.

Mrs. Althea F. Keys,
The Coffee Cup
Merrill, Wisc.

Des Moines Lapidary Society

Greetings to all the Rock Clubs and we of the Des Moines Lapidary Society wish for you a Happy and Prosperous Rock Hunting Year.

We have had a very busy fall, preparing for the Christmas season and now that we have given away to our admiring relatives and friends, all of the earrings, pendants, brooches, cuff links, tie clasps and rings that have kept us so busy, perhaps we can settle down and make a few things for ourselves. We get our pleasure in the beauty of the rocks we work with and in knowing how much our workmanship is improving.

At our November meeting at the Art Center, we held a contest in jewelry made from Montana Agate. The jewelry was of high polish and very lovely. We also had a display of tumbled rocks. The practical experience of our members was most interesting and amusing. Some have regulation tumblers, and others have home made tumblers. My husband has a regulation tumbler and has been most successful in tumbling rocks—getting a nice high polish on them. We think of trying to tumble rocks cut to specification.

On December 21st, we held our Christmas banquet for our members and included our guest members. Some of our members were ill and unable to attend but we had 75 place cards on our beautifully decorated tables. A short program by the children of our members was greatly enjoyed. Speeches by the grown-ups concerning the grab bag coming up was also welcomed. It is amusing what a grab bag can contain. Some of our members brought pine cones, drift wood, cedar brush, rocks and shells and some ornaments, and they invited our guests to try arranging center pieces—a prize to be given to the winner. Many beautiful pieces were made and we had a hard time selecting the winner. Four prizes were given.

I heard something yesterday that pleased me very much. A gentleman from Montana, visiting in Des Moines, told his host that he kept track of the things we were doing in Des Moines thru his rock magazines. I felt as if someone patted me on the back. Happy New Year from

Sue M. Bennett, Press Corres.
924 Loomis Avenue
Des Moines 15, Iowa

Manhattan Gemstone & Mineral Club

Regular monthly meetings of the Manhattan Gemstone and Mineral Club are held on the second Thursday at 8:00 P.M. in the Community House in Manhattan, Kans. Visitors are always welcome.

Mrs. Harold L. Nonamaker
1011 Bertrand Street
Manhattan, Kansas

Arizona

Mineralogical Society of Arizona

Mineral exhibits at the Arizona State Fair, held in November, included over a hundred junior displays, and more than 1500 specimens.

Grand View School, Phoenix, won the Phelps-Dodge Trophy for best cabinet speci-

mens, and the Arthur L. Flagg Trophy (offered this year for the first time) for best miniatures. McKinley School, Phoenix, won the State Fair High Score Plaque. The Ajo Public Schools came in second and third.

The junior exhibits this year were outstanding in numbers and quality, showing marked increase in interest over all other years.

One unusual display was a case of petrified sea shells filled with beautiful red agate. The specimens were exhibited by Dale McFarlane, junior member of the MSOA, who found the deposit in Arizona.

Among adult exhibits was a case of fossil trilobites, oldest known animals in the world. The display was from the collection of Lt. Col. and Mrs. William W. Hotchkiss, and is valued at $10,000.

A display presented jointly by the Arizona College of Mines, the Arizona State Museum and Geology Department of the University of Arizona, showed prehistoric mammoth remains together with artifacts of prehistoric man found with them dating back to 10,000 years ago. The remains and artifacts excavated recently near Hereford, Arizona.

The great variety of mineral specimens were of outstanding quality; also hand-made jewelry, which included jewelry from out of space—stardust and meteorite jewelry from the H. H. Nininger collection.

Among the unusual mineral specimens with unusual names was one belonging to Richard A. Beleaux; a quartz pseudomorph after calcite paramorph after an aragonite pseudohexagonal trilling from near Romero, Texas.

At the Nov. 17 meeting a memorial plaque, honoring Luther Steward, first vice president of MSOA, was presented to the society by Miss Bertha Kirkland in the name of the Phoenix Piano Teachers' Association and the Arizona State Music Teachers' Association. Mrs. Luther Steward has been an active member of both organizations for many years. Mrs. Steward, her grandson, John Steward, and his wife were present at the meeting.

At this meeting the Arthur L. Flagg Trophy, won at the State Fair by Grand View School, was presented. The presentation was made by Arthur L. Flagg (Mr. Rockhound), himself, to Ray Carpenter, who received it for the school. Present at the meeting was Mrs. Vetis Redden, teacher of the school and also a member of MSOA.

Under the capable management of Jo Parsons, program chairman, details of how to clean and care for minerals were described by various members of the society.

One of the highlights of 1956 was a box of minerals sent to the MSOA by Dr. Paul E. Halter, on behalf of the Mineralogical Society of Washington, D. C. A reciprocal box was assembled by the members of the MSOA and Fred Burr was commissioned to mail it to those nice rockhounds in Washington, D. C.

Ida Smith, Cor. Sec'y.
2238 East McDowell,
Phoenix, Arizona

Australia

Lapidary Club of N.S.W. Australia

A little more than three years ago an enthusiastic manufacturing jeweler of Sydney, Mr. Jack S. Taylor, F.G.A.A., called a meeting and formed what is now widely known as "The Lapidary Club of New South Wales." From this humble beginning, membership has steadily grown to approximately 400, and more are being added to the ranks at each monthly meeting. All of the States are represented and there are some overseas members, one of whom resides in the U.S.A.

The founder (and president) is teaching those interested, the art of Lapidary, and necessary equipment can be purchased through the club. Apart from being apprenticed to the trade, there is no other means of learning lapidary work in Australia. A great deal of credit is due, therefore, to Mr. Taylor, in setting the foundation for an interesting and rewarding hobby within the reach of all. Our club is the only one of its kind in Australia as yet.

This country is rich, potentially so, in every kind of gem material as well as having a liberal supply of many types of economic minerals. It is the aim of the club to popularise the lesser-known gemstones and foster an interest among hobby-minded people to install equipment in their own homes for cutting and polishing. Creditable work is being done by those who have taken advantage of the lessons and demonstrations given at club meetings.

Another section of the club deals with field work. Unfortunately for Sydney folk, there is little in the way of suitable cutting material in the vicinity, owing to huge sandstone deposits in almost every direction for many miles. However, we are able to collect good specimens of prehnite, silicified wood, chalcedony, jasper, a little agate and clear quartz within a day's travel. Short vacation periods will take us to deposits of topaz, sapphire, spinel, amethyst, smoky and rose quartz, citrine and precious opal. Collectors are able to find specimens of many kinds of rocks and minerals on these trips.

Our climate is ideal for the healthful out-of-doors activities and much enthusiasm has been shown in the field branch. We have many hundreds of miles of glorious Australian bushland completely unspoiled, a source of ever-increasing interest and enjoyment for

those who invade its peacefulness in search of the beautiful things which nature hides so carefully.

The latest American books dealing with lapidary and allied subjects are added to our library as funds permit. Each copy of ROCKS & MINERALS is received with eagar interest as it comes from the press, while older copies are read and re-read.

Our Fourth Annual Exhibition has just been held to which the public was invited and great interest was shown in the gems and minerals displayed. The year's work, carried out by amateur cutters using their own equipment, was of a very high standard. Colour pictures were projected to show the beautiful places members visit when collecting. This exhibition was the biggest and best yet and proved to be an unqualified success.

Those of us who are fortunate enough to belong to this fine club have a truly rewarding hobby. Could anything be more satisfying than finding your own rough gemstones (be it a thousand miles from home), transforming it from a nondescript piece of rock into a thing of gleaming, symmetrical beauty, using your own equipment? Is there any other hobby which has so much to offer?

Valerie J. Reeve,
Librarian,
Lapidary Club of N.S.W.
164 Pitt Street,
Sydney, Australia

The Gemmological Association of Australia

During Easter 1957 the South Australian Branch of the Gemmological Association of Australia will be conducting a field excursion to the famous Andamooka Opal Field in the northwestern section of the state. In conjunction with this excursion we propose holding a convention—in this instance taking the form of a symposium on the "Opal Industry in Australia". The lack of facilities prevent it being more than a modest experiment, merely a general get-together with the local "gougers" when some of the problems facing the industry—purely a prospector's one—can be discussed. We hope, however, that it will be merely the forerunner to much more ambitious efforts, to bigger and better field conventions.

Andamooka is an isolated field some 400 miles N.N.W. of Adelaide the state capital, in dry semi-arid pastoral country, its rail head being almost a hundred miles to the south.

The journey, a full day's travel each way, much of it over rough bush tracks, will be made by chartered road bus, leaving Adelaide at 5 a.m. Good Friday and returning to the city late on the evening of Easter Monday.

A similar excursion was made at Easter 1955, an account of which appeared in the AUSTRALIAN AMATEUR MINERALOGIST Vol. 1 No. 2, June 1955.

It was suggested to me by Mr. Charles Derby of Rahway, New Jersey, recently in Adelaide, that this may be an item of news interest to your readers and that pre-knowledge of the excursion would give overseas gemmologists, should they happen to be in Australia at that time, an opportunity to visit the field. Charles himself spent more than two weeks there during June-July last, and doubtless American gemmologists will be hearing of his experiences after his return to the States sometime next year.

Should more detailed information be of interest, I will be only to pleased to supply it.

R. V. Harvey, F.G.A.A.
Dept. of Economic Geology,
University of Adelaide
Adelaide, South Australia

HOWARD M. IRISH

(Obituary notice)

"I am sorry to report that Mr. Howard M. Irish, of Buckfield, Maine, died suddenly on January 22, 1957. He was 64 years old.

Mr. Irish was widely known and noted for his knowledge of gems, minerals, and the history of local mines. He owned Mt. Mica (the old mine) and several other mines and properties. He held honorary membership in several mineral societies."

Charles F. Marble
Buckfield, Maine

St. Louis Mineral and Gem Society

Identification and the distinctive qualities of certain minerals and gem stones will be the subject of a panel discussion at the regular meeting of the St. Louis Mineral and Gem Society to be held at the St. Louis County Library, 6814 Natural Bridge Road, on March 1, 1937, at 7:30 p.m.

Panelists will be drawn from members of the Society according to R. M. Edwards, president. A highlight of the program will be a discussion period during which time the audience will be permitted to direct questions concerning the subject to any or all members of the panel, Edwards said.

TUCSON GEM & MINERAL SOCIETY

"Among the many interesting exhibits to be shown at the third annual Minneral Show of the Tucson Gem and Mineral Society on March 9th and 10th in the Pima County Fair Building, Tucson, Arizona, Erna Clark of Redlands, Calif. will bring her unusual "Dinner of Rocks", and Grant Ostergard of Pasadena, Calif., will exhibit his "Working Water Wheel" made entirely of polished pieces of petrified wood.

Lena C. Marvin,
1207 E. Speedway
Tucson, Arizona

NOVICE COLUMN

In the Sept.-Oct. 1953 R&M, Gordon ViGario, 2231 Pine St., Bakerfield, Calif. suggested that a Novice Column be opened for rank beginners in mineral collecting. These amateurs, who do not know one mineral from another, may submit their names to the Novice Column.

It is our hope that collectors having duplicates may donate a few specimens to one or more novices who are expected to acknowledge receipt of specimens received and to reimburse each sender for postage paid on the packages. Please print or write plainly the names and localities of all specimens sent novices, and if 2 or more minerals appear on the same specimen, identify each. Remember the novices do not know one mineral from another, so please be as helpful as you can.

The following is the 20th list of novice collectors:

Stuart & Paul Overholtzer, Rt. 6 Box 411-B, Modesto, Calif.

Edward L. Dandurand, Box 101, Idledale, Colo.

David Repp, (13 yrs.), South St., Collinsville, Conn.

G. C. Stockwell, (12 yrs.), Box 26, Bethlehem, Conn.

Gordon C. Coates, 920-12th Ave. So., St. Petersburg 5, Fla.

Perley W. Bradford, #7 Pine St., Springvale, Me.

Stuart S. Smith, (11 yrs.), 34 Clayton St., Portland, Me.

Robert S. Freeman, 100 Edge Hill Rd., Milton 86, Mass.

Lionel A. Lambert, Bear Hill Rd., Merrimac, Mass.

Margaret L. Fisher, 607 - 7th St., Jackson, Mich.

W. R. McCartney, R.R. #2, Jackson, Mich.

Ralph J. Marks, Sr., R.R. #2, Box 192, Coloma, Mich.

Richard R. Kress, 7321 Lansdowne, St. Louis 19, Mo.

Phyllis Burgess, 98 Grove St., Montclair, N. J.

Nathan Grossman, 44 Ferry St., South River, N. J.

Connie Breining, 446 Carpenter Pl., Union, N. J. (11 yrs.),

Raymond B. Conrad, (13 yrs.), 1113 Liberty Ave., Union, N. J.

Barbara Landau, 75 Bank St., Apt. 1G, New York, N. Y.

Robert J. Rourke, (14 yrs.), 1935 Ferguson St., Schenectady, N. Y.

Felix Schlossberg, R.F.D. Orient, L.I., N. Y.

J.S. Wojcik, 1088 Fleming Falls Rd., Mansfield, Ohio.

Beverly Tiebherr, (11 yrs.), 209 East Sixth St., Perrysburg, Ohio.

Earl Decker, Rt. 1, E. Bigelow Ave., Findlay, Ohio.

Sam Ellis, 1304 Bernard Ave., Findlay, Ohio.

Charles Conklin, (15 yrs.), 1724 Vinal St., Toledo 5, Ohio.

Mrs. Flo B. Arnold, Gettysburg, #4, Penn.

Bob Brown, 910 Fidelity Dr., Pittsburgh 36, Pa.

Miss Frances Castlemun, 396 Alexander St., Memphis, Tenn.

John Blizzard, Jr. Box 2089, Collegedale, Tenn.

Norman F. Willard, RFD 3, Box 205, Fredericksburg, Va.

J.S. Seldon, (13 yrs.), P.O. Box 502, Hampton, Va.

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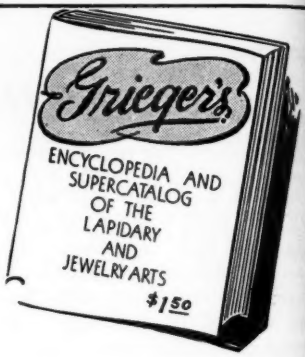

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Here are some actual letters we received from customers who purchased our Encyclopedia.

"This book is more than just a Catalog; it is a source of much valuable information for amateurs, craftsmen, dealers and professionals."

Dr. J. Daniel Willems
Earth Science Publishing Company
Chicago, Illinois

"I want to thank you for your prompt adjustment on the saw blade and damaged mounting. It is really a pleasure to do business with a firm which is so cooperative and accommodating. Again, I thank you."

Ted H. Lattin
Pagosa Springs, Colorado

"Congratulations. The SUPER-CATALOG is more than 'SUPER.' You folks are doing more to help us who are combination 'rock-hound, lapidarists and amateur jewelers,' than any firm elsewhere in these United States. I hope you grow and grow and grow, until you have to build a skyscraper to hold your stock and business. Congratulations."

One of your newer customers,
H. G. Wilson, Jr., San Diego, Calif.

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Albuquerque, New Mexico

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Ben Hur Wilson, Chicago, Illinois

"Please send me two copies of your 1956 ENCYCLOPEDIA. Wouldn't swap my 1950 copy for a farm out West."

Stanley O. Goding,
Springfield, Vermont

Form K9-16

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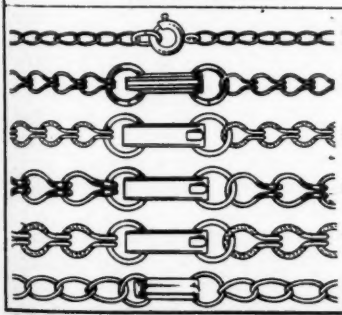

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WITH OUR ADVERTISERS

Conducted by James N. Bourne
% Rocks and Minerals, Box 29
Peekskill, N. Y.
Advertisers are cordially invited to submit News Items to this Department.

Scott J. Williams, 2346 S. Scottsdale Road, Scottsdale, Ariz., sends us his mineral collectors list issued in December. This list features many fine native gold specimens from the Red Ledge Mine, Washington, Mother Lode, California. Also many fine specimens of South American minerals, namely, aquamarine-Brazil, amethyst-Uruguay, cassiterite-Bolivia, lazurite-Chile, tourmaline-Brazil, fluorite-Bolivia, and many others. Further correspondence from Scott J. Williams reads as follows:

"We are very pleased to send our current mineral collectors' list to you and offer you a convenient and easy method of selection. You will note that this type of listing differs from the usual catalog in that it does not include all material currently in stock. Specimens described in our lists are recent acquisitions. By this means we can better keep you advised as to what's new, but regular monthly distribution of our lists must be limited to regular customers.

"It is our desire to have you own specimens that you will enjoy and display with pride. Your inquiries are always welcomed."

Note: Your dealings with Scott J. Williams will be most pleasant and specimens purchased from him will become ones that you will be proud to own.

Kurth's Jewelry, Hendricks, Minn., has taken over the dealership of Wilfred C. Eyles, who has been an opal dealer since 1918. Kurth's Jewelry will continue to advertise with us in the absence of Mr. Eyles, and will continue the friendly associations with buyers and dealers everywhere as passed on to him from Wilfred C. Eyles.

Note: We therefore are pleased to introduce Kurth's Jewelry to those interested in the purchase of opal that really command that second look.

From R & B Art-Craft Co., 11019 South Vermont Ave., Los Angeles 44, Calif., comes the following notes:

"See us for your needs in: Lapidary units, Jewelers tools, Jewelers supplies, silver sheet, findings, mountings, enamels and supplies, books, etc. Dealers' inquiries invited."

Note: R & B Art-Craft Co., presently occupying our 3rd Cover and are featuring with this issue the SPEC-TEC blacklight for prospector, mineralogist, and hobbiest. See your fluorescent minerals come to life with this blacklight. Take note of their ad for further information re: to these popular SPEC-TEC blacklights.

Information received from W. S. Shirey "The Nugget Man" of 7931 Santa Monica Blvd., Hollywood 46, Calif., reads as follows:

"Our retail department, with its new desert decor, is now open. We have a large stock of the finest NUGGET GEMS, (tumble-polished stones) in America for you to select from, to make your own cuff-links, bracelets, necklaces, earrings, television lamps, coffee tables and many, many other items. Retail orders filled. Write for price list."

Note: We congratulate Mr. Shirey upon the opening of his new retail department and know his many satisfied customers will be pleased as to this additional increase in service now available to them.

Ward's Nat. Science Establishment, Inc., Box 24, Beechwood Station, Roch-

ester 9, N. Y., is featuring with this issue as per our back cover space of R&M an item forever present in the minds of mineral collectors . . . Where can I display my specimens? . . . the answer of course is mineral display cabinets.

We have had many of our readers write in from time to time commenting on the lack of space for the display and storage of minerals. Many, sooner or later, build their own cabinets, but a good many would like to purchase one intact. Well, Ward's is offering mineral display cabinets as you will note as per their back cover ad this issue.

Your specimens will take on added glamour displayed in one of these fine display cabinets and you'll feel that more proud with the many comments received with this acquisition.

So if you need a display cabinet, get one from Ward's and you can start toting your specimens out of the cellar, attic, and garage and show them off.

We are pleased to welcome Harry and Rachael Condo, of the Condo's Rock Shop, 138 Main St., Seal Beach, Calif., advertising with us beginning with this issue. Here is a brief item relative to the Condo's as sent to us by Mr. Condo.

"We started out to collect minerals many years ago as a hobby. I was raised in the hard coal region of Penna. near Harrisburg, in a small town named Lykens. My grandfather migrated to this country from Holland and came from the gem cutting lowland. My grandfather started his own Jewelry store and many the hour when I was a small boy I spent watching him whittle wooden wheels for the first clocks. Five uncles in turn followed the trade.

"I think the greatest joy of my younger days was when my grandfather would let me "pump" the gem cutting machine. It was ran by a foot treadle similar to the old style sewing machine. Too fast or slow meant a cuff on the ear as he was from the old school of Dutch task masters."

Note: Take a look at the ad of Condo's Rock Shop with this issue—he'll be pleased to receive your inquiry or order and he will refund your money or replace your purchase if not satisfied, so he writes us.

We had the pleasure of meeting Mr. Parser of A.G. Parser, Inc., 15 West 44th St., New York 36, N. Y., at the Eastern Federation Convention held in Baltimore in September. He then related "that he had received a recent import of very fine translucent midnight-blue aquamarine from Brazil." Readers may contact Mr. Parser as to the possibility that he may still have in stock specimens of this fine import from Brazil.

An item received from George Green, Jr., Prop. of Ex Minerals Products, P.O. Box 36, Westminster, Colo., reads as follows:

"We have discontinued the line of minerals sets that were sold before and are now producing single specimens in boxes. We have sold out all the retail material on hand and will start to sell wholesale only, except special articles that will be sold to the public, as advertised in R & M. We invite dealers to send for our catalog of materials on hand, jewelry and other materials."

"I wish to thank you and your magazine for the cooperation you have extended to us so far and we will continue to do business for quite some time."

Note: We have always enjoyed our relations with Mr. Green of Ex Mineral Products and wish him continued success in the future. You readers will find his ad in our classified section with this issue featuring some excellent buys.

Harry Ross, 61 Reade St., New York 7, N. Y., forwards us the following item of interest to our readers and reads as follows:

"I have been in business over 28 years and during that time have seen the rise and fall of interest in minerals in the New York area (and market). My expe-

rience has been that for the last 15 years interest has lagged greatly, but is now again awakening.

"During my years of business I have sold many, many TONS of rocks and minerals, especially for U.V. work, but because of lack of interest I have been forced to let my stocks go down to very little.

"Therefore will you be kind enough to advise the readers of R & M that because of increased interest in minerals I WILL AGAIN CARRY MINERALS BOTH FOR U.V. AND POLISHING. Stocks carried will depend on demand. All interested in this are invited to visit my store daily 9 a.m. to 6 p.m. and Sat. 9 a.m. to 3 p.m."

Note: Mr. Harry Ross has been advertising with us regularly via our display ads and we thank him for above interesting item. He'll be pleased to have you drop in for a visit when in New York at the above hours mentioned.

To Our Advertisers

As of late, quite a bit of advertising copy is being received by us after our deadline date of the 1st day of the odd months year around.

The importance of sending us copy on deadline date is that we can forward you a proof of your ad for your correction or change. May we suggest that you post our deadline date for ad copy where you can note it at a glance, such as desk, bulletin board, or calendar.

Firelands Historical Museum to Reopen Soon

The Firelands Historical Museum in Norwalk, Ohio, with James Overhuls as curator, will be reopened early in 1957, after being closed to the public for some time. It has been moved from the basement of the Public Library to its new home just north of the library. This building, one of Norwalk's landmarks, was moved to this site and restored. Much of the restoration work as well as cleaning, recataloging and displaying was done by volunteers. The Firelands Geological Club was in charge of the rocks, minerals and fossils, which are displayed in the Natural History Room. An interesting feature is the concretions taken from the Huron Shale and which are used as yard ornaments around Norwalk. The club is planning to have a display of the crystallized minerals found in the limestone quarries of northern Ohio.

The museum has many other interesting and worthwhile displays including an extensive firearms collection, a pioneer room, an archeology (many local Indian artifacts), a children's room, with dolls and toys, also costumes and a display of early lighting.

We hope everybody who goes through Norwalk will stop. The museum will be open every afternoon. Admission 25 cents.

Mrs. Clarence Carey,
Liasion Officer,
Firelands, Geological Club
Collins, Ohio.

ROCK HATER

Oh ye who say you like not rocks,
What is it that I perceive?
Could that be a polished garnet gem
Adorning your cuff-linked sleeve?

Why wear you that fancy silver ring?
Your finger does not look bare!
Is it the metal you wish to show?
Or the beautiful opal there?

What is that thing that shines so bright
In the pin upon your tie?
The clasp is hidden deep in the cloth,
'Tis the diamond that catches the eye.

Your belt is of leather, as most belts are,
But the buckle is nice to behold.
That onyx initial is pretty, indeed,
And really looks better than gold.

Oh ye who say you like not rocks,
Give me your jewelled pen,
Your cuff links, your ring, your belt and pin,
And I will believe you—then.

Fran Schiller
Luke, Maryland

Collector's Corner

For the special benefit of collectors who may be living in areas far removed from other collectors we have opened this feature. In this corner, a collector may have his name and address listed for the purpose that other collectors may write him in the hope that through correspondence, exchange of ideas and specimens, new friendships may be formed. Listings are free.

Rose Wey,
12526 So. Rose Ave., Downey, Calif.

H. J. Kendrick, Ophir,
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Haswell, Colo.

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Leo A. Miller,
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Charlie Bennett 210 W. Franklin St.
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John Wilson, 44 Van Cort. Pk. Ave.,
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Harold J. Lienemann,
Box 42, Gouverneur, N. Y.

Maxine Megyesi 155 E. Main St.,
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Allison Cusick, RD#1,
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Tommy Kelley (11 yrs.),
528 S. 79 E. Ave., Tulsa, Okla.

Mrs. Ammon Schwartzbach,
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E. Providence, R.I.

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P. M. Plimmer, Box 701, Alpine, Texas.

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Walla Walla, Wash.

M. W. Anthony, P. O. Box 260,
Bellingham, Wash.

Earl C. Peterson
New Lisbon, Wisc.

Miss Carol Corns (16 yrs.), 365 Hillsdale
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Ernest Windisch 1576 Desmarchais Blvd.
Montreal 20, Que., Canada.

W. Erlach, P.O. Box 52,
Umtali, Southern Rhodesia,
South Africa.

VISITING ROCKHOUNDS WELCOME

The following subscribers would be delighted to have rockhounds call on them when passing through their cities. If any one else wants his name added to the list, just let us know.

R. A. Richards, Box 44, Morristown, Ariz.

Mrs. John A. Talbot, 1221 W. 6th Ave., Pine Bluff, Ark.

Rose Wey, 12525 S. Rose Ave., Downey, Calif.

Donald F. Crain, Metropolitan Life Ins. Co., Grand Junction, Colo.

Meade B. Norman, 1524 Mitchell Ave., Tallahassee, Fla.

Bert C. Cole, 2233 Broadway, Boise, Idaho.

Galena Rock & Mineral Museum, Route 20 & 80, Galena, Ill.

Russell P. Neuwerk, 540-20th Ave., Moline, Ill.

Steve Sturm, 521 Roosevelt Ave., Kewanee, Ill.

F. L. Fleener, 1415 Rosmer St., Joliet, Ill.

Leroy H. Grossman, 211 N. Park Ave., Batesville, Ind.

Edward Rushton, 730 Bexley Road, West Lafayette, Ind.

Rex Lucas, Sumner, Iowa.

Mark Dunn,
316 Summer St., Cheroke, Iowa.

David B. Sleeper, Box 4,
Sabuttus, Me.

Leroy Leisure, 500 Townsend Ave., Baltimore 25, Md.

Mr. & Mrs. W. M. Krause, 14190 Glastonbury Rd., Detroit 23, Mich.

Mrs. Marion E. Hull, 704 Gratiot Ave., Saginaw, Mich.

Robert Schenk, R1 Box 71, Republic, Mich.

Carl F. Lemin, 624 E. Division St., Ishpeming, Mich.

Geo. C. Dick,
9207 Argyle, Overland, 14, Mo.

Brentwood Lapidary & Gem Shop, 8913 White Ave., St. Louis 17, Mo. Phone WOodland 2-4067.

Robert Kissick, 7140 Theodore Pl., St. Louis 20, Mo.

Alvin W. Kemp, 231 Elmwood Blvd., Jackson, Mo.

1. Everett,
2941 N. 65th, Lincoln, Nebr.

Edward T. Barone, 48 Elmwood Rd., Verona, N. J.

Clark P. McLean, Brass Castle Road, RD #1, Belvidere, N. J.

Don Alfredo, 322 Linda Vista,
Las Cruces, N. Mex.

Vernon Haskins, East Durham, N. Y.

Leo A. Miller,
Blossvale, N. Y.

Charlie Bennett, 210 W. Franklin St. Horseheads, N. Y.

Mrs. A. E. Van Inwegen,
195 Broadway, Monticello, N. Y.

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Donald V. Dalton, Box 68,
Chimney Rock, N. C.

Dept. of Physical Science,
Belmont Abbey College,
Belmont, N. C.

Visiting Rockhounds Welcome (Continued)

Fred J. Teague, 1612 3rd Ave., S. W., Hickory, N. C.

D. R. Holder, 4485 Indiana Ave., Winston-Salem, N. C.

Mr. & Mrs. Clarence Carey, Collins, Ohio

Bill Berke, 1446 Earlham Dr., Dayton 6, Ohio.

Eileen Philpott (16 yrs.), 2200 Wascana Ave., Lakewood 7, Ohio.

Albert Laws Kidwell, 1410 Terrace Drive Tulsa, Okla.

Rev. Wm. J. Frazer, 625 Main St., Moosic 7, Penn.

Mrs. Ammon Schwartzbach, 2239 Logan St., Harrisburg, Pa.

Paul M. Popovich, 124 Lincoln Ave., Leechburg, Pa.

Donald H. Leeds, 2025 Westfield Terrace, Bethlehem, Pa.

Leighton Donley, Box 101, Miners Village, Cornwall, Pa.

H. C. Van Tassel, 8009 Westmoreland Ave. Pittsburgh 18, Pa.

Edward Carey (11 yrs.), 3 Summit St., E. Providence, R. I.

Adolph Hillstead, 1309 4th St., Brookings, S. D.

M. S. Ortman, Ortman Museum, 6 mi. N. of Marion, S.D.

Mrs. Edwin P. Olson, Beresford, S. D.

P. M. Plimmer, Box 701, Alpine, Texas.

Howard V. Hamilton, 1340 Crandall Ave., Salt Lake City 6, Utah.

Charles A. Steen, Utex Exploration Co., Inc., Moab, Utah.

James M. Fagan Wallace, Va.

G. W. Weber, 1320 Portland Ave., Walla Walla, Wash.

Looking Back Twenty-Five Years Ago

in ROCKS AND MINERALS

March 1932 issue

Amber, by Walter J. Beichert.—A general article on this interesting fossilized vegetal resin, pp. 1-5.

Treatment of gem stones by heat, by George O. Wild. Some gem stones are artificially heated to improve or completely alter their colors, so as to improve their beauty. Pp. 9-13.

Fluorite deposits of Southern Illinois and Kentucky, by Frederick H. Pough. An intensely interesting article by Dr. Pough, who is still one of our valued subscribers, pp. 14-16.

Jet, by W.E. Howarth. Jet, much used for ornamental purposes, is the gem variety of coal, pp. 17-19.

Publications Recently Received

Ward's Geology Catalog No. 563

Ward's Natural Science Est., Inc., P.O. Box 24, Beechwood Sta., Rochester 9, N. Y., has issued their Geology Catalog No. 563. This is a beautifully illustrated 88 page publication, 8½ x 11, with an attractive cover, in color. The catalog features a wide variety of items which Ward's carry in their huge stock—minerals, rocks, fossils, soils, geological and mineralogical nupplies, slides, maps, cabinets, display cases, lapidary units, fluorescent units and minerals, radiation detection instruments, etc, etc.

Ward's have also issued Cat. No. FM 9, a 16-page publication featuring mineral specimens. This, too, is an illustrated, 8½ x 11 publication and full of choice mineral items.

New Mexico Publication

Economic and Engineering aspects of mica and associated minerals of certain areas in North Central New Mexico.

This report on mica mining, by S. H. Glassmire Jr., assisted by J. P. Whalen, is a 26 page publication. It was prepared to advise and recommend to the Economic Development Commission on development of the industry, also to add another scientific report of use to prospectors.

Published by the New Mexico Economic Development Commission, Santa Fe, N. Mex.

Virginia Publication

Titanium, by Arthur A. Pegau.

This is a 17 page report on titanium which promises to be the outstanding new metal of the 20th century. Often referred to as "the wonder metal," titanium is now regarded as one of the most valuable structual materials.

Published by Virginia Division of Geology, Box 3667, University Sta., Charlottesville, Va.

On the Petrology of Antarctica

Here is an interesting 23 page paper on the petrology of Antarctica by Duncan Stewart, Carleton College, Northfield, Minn.

Since 1895 over 100 papers have been published relating to the chemistry, mineralogy, petrography, and petrology of Antarctic rocks. Listed are 174 mineral species, subspecies, and varieties, as well as those of questionable occurrence, that have been reported from Antarctica.

This paper was printed in "Antarctica in the International Geophysical Year, Geophysical Monograph No. 1, 1956, pp. 52-74.

Billings—The Geology of New Hampshire.

Concord, N. H., Nov. 15, 1956—A third "milestone" publication in the series of geology reports issued by the State Planning and Development Commission is the 203-page pamphlet entitled "The Geology of New Hampshire — Part II — Bedrock Geology" by Marland P. Billings, it was announced today.

The new publication, of necessity more technical than many of its predecessors, is accompanied by a large map which shows the types of rock and major rock structures underlying the topsoil of the Granite State. Officials "suspect" that the map and text of the new report are based upon more detailed observations and studies than have ever been made on any other area of comparative size and complexity in the U.S.

Marland P. Billings, Professor of Geology, of Harvard University, began his study of New Hampshire bedrock in 1925 and through the 30 intervening years, inspired similar interest in many graduate students. He has also cooperated with many geologists from other colleges and universities in studying the rock strata of the Granite State.

The map and pamphlet are a "by-product of efforts to understand the geological history of New Hampshire; that is, to learn the sequence in which the rock formations developed and the physical conditions under which they formed." Such information is considered indispensable in planning the search for new mineral deposits, including water.

T. Ralph Meyers of the University of New Hampshire, State Geologist, paid high tribute to Dr. Billings and his many years of work which made possible the new publication. Said Meyers, "the present bedrock map and text contain evidences of major structures and concepts not included in older state surveys. In fact, as far as I know, some of those features have not been indicated in the state map or bedrock text for any other state."

The new report, including the large (58 inches by 42 inches) bedrock geology map which was published in cooperation with the U. S. Geological Survey, is being sold at cost, ($3.50). The map itself is $2. if sold separately. This is in keeping with the Commission's policy to charge cost price for geological publications in order to maintain a "rotating fund" for printing other reports.

Published by State Planning and Development Commission, Concord, N. H..... $3.50.

Occurrence of gem corundum in North Carolina.

by Geo. R. Poole.

Here is an interesting 4-page paper on gem corundums. (Red rubies and blue sapphires) that are found in Macon County of Western North Carolina (in Cowee Valley and on Corundum Hill). The author calls this area, North Carolina's "jewel box."

This paper is apparently printed privately by the author, who is in government service—Geo. R. Poole, MDAP SEC., J-4 Div. HQ, Far East Command, APO 500, San Francisco, Calif.

Cinnabar, a game of rocks and minerals.

Naturegraph Company and Nature Games, P.O. Box 46, San Martin, Calif., have put on the market a deck of cards bearing the name, "Cinnabar, a game of rocks and minerals. There are 56 cards to the deck, each card illustrated with a beautiful mineral in color. This game, plus five others, one each on birds, butterflies, flowers, trees and mammals have been devised and introduced by Ruth Wheeler and Vinson Brown. Cinnabar appears to be an interesting game and should help a beginner to learn more about minerals.

No price quoted for the set but this may be learned on contacting the company.

Vermont Publictions

We announce *for sale* the following geological surveys published jointly by the Department of Forests and Parks, and the Vermont Development Commission through its Vermont Geological Survey:

Vermont: Department of Forests and Parks. The Geology of Groton State Forest — by Robert A. Christman. 1956.

Vermont: Department of Forests and Parks. The Geology of Mt. Mansfield State Forest — by Robert A. Christman. 1956.

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MAGAZINES

Rocks and Minerals, Box 29, Peekskill N.Y., America's oldest and largest magazine devoted to rocks and minerals $3.00 per year, sample copy 60¢